

There are several different ways that State DOTs and MPOs can and are reducing GHG emissions. As explained earlier, TxDOT has several activities, programs, and funding initiatives that have the effect of reducing GHG emissions.³⁴ Additionally, with the Carbon Reduction Program in the IIJA, Congress has made a substantial commitment to reduce GHG emissions from the transportation sector, and it is probable to assume that there will be additional GHG-related initiatives coming from Congress in the future. For all the reasons outlined in the comments above, TxDOT urges FHWA to allow these initiatives to continue, without imposing an additional unreasonable and unauthorized CO₂ performance measure on the NHS administered by State DOTs and MPOs.

³⁴ Examples include TxDOT's Recycling and Clean Construction and Operation Program; provision of approximately \$232 million per year in nonattainment areas for federally funded Congestion Mitigation Air Quality (CMAQ) improvement projects (e.g., bicycle and pedestrian facilities); TxDOT planning and designing for bicycles and pedestrian funding programs, including approximately \$172 million per year in transportation alternatives projects and \$20 million per year in pedestrian mobility, accessibility, and safety projects; greening the TxDOT fleet with electric vehicles and alternative-fueled vehicles; and TxDOT's Clean Air Plan, which encourages over 11,000 employees statewide to reduce vehicle emissions.

Comments of the South Dakota Department of Transportation
to the
Federal Highway Administration (FHWA)
in Docket No. FHWA-2021-0004
National Performance Management Measures;
Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure
Notice of Proposed Rulemaking
October 13, 2022

The South Dakota Department of respectfully submit these joint comments on the Notice of Proposed Rulemaking in this docket, published by the Federal Highway Administration (FHWA) at 87 Federal Register 42401 (July 15, 2022) (“NPRM”).

Introduction and Overview

The South Dakota Department of Transportation supports the comments submitted to this docket by the State Transportation Departments of ND, MT, WY, ID, and SD)

We oppose the proposal and recommend that it be withdrawn. However, should FHWA proceed to adopt a rule in this docket, we offer important suggestions to improve it.

We also emphasize at the outset that these comments concern the specific rule proposed in this docket. These are not general comments on environmental issues. We are for a better environment but oppose the proposed rule in this docket.

The proposed rule would require State Departments of Transportation (DOTs) and metropolitan planning organizations (MPOs) to establish targets for greenhouse gas (GHG) emissions from on-road mobile sources, specifically CO₂ emissions, on the National Highway System (NHS). Under the proposal, the targets not only would have to be declining targets (i.e., calling for reduced levels of tailpipe CO₂ emissions from a reference year, using a metric defined by FHWA in the proposed rule), but “demonstrate reductions toward net-zero targets.” The proposal in the NPRM would use as the reference year 2021, a year when economic and transportation activity was held down by the COVID virus, rather than this year or a later year. FHWA signals in the NPRM that penalties could be imposed on States that do not implement the rule per FHWA requirements.

Our key points include the following --

- FHWA lacks the authority to promulgate this rule, and that conclusion was reached by the previous Administration.
- Should FHWA in any event proceed to promulgate a performance measurement and management rule regarding GHG emissions, we would still oppose the rule unless amended to clearly establish that: only states (and, to the extent applicable, MPOs) have the authority to set the emissions targets, whether declining, unchanged, or even

- increasing (such as due to economic growth); further, if adopted, the rule should be revised to specify that no penalties may be imposed for not meeting a target.
- Rural states, especially in northern climates, have fewer options to reduce fuel consumption and VMT due to minimal congestion and population density. This issue is compounded due to the fact that there is no passenger rail or mass transit within our State. Furthermore, electric vehicle adoption rates are generally lower due to cold temperatures and weather conditions which further restricts our ability to reduce CO2 emissions.
 - We also strongly disagree with the proposed use of calendar 2021 as the reference or baseline year for measuring CO2 emissions and setting targets, as 2021 emissions levels were reduced due to the COVID pandemic.

We also disagree generally with the approach of the rule as states, particularly very rural states such as ours, have little ability to influence CO2 tailpipe emissions and some rural states have restrictions on the use of state funds which can only be used for the maintenance, construction and supervision of highways and bridges.

Please refer to the comments to the docket from the State Transportation Departments of ND, MT, WY, ID, and SD for detailed discussion on these key points

The South Dakota Department of Transportation thanks FHWA for its consideration and recommend that any further action on the issues addressed in these comments be in accord with these comments.



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

**Department of Environmental
Conservation**

DIVISION OF AIR QUALITY
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October 11, 2022

Federal Highway Administration
Submittal via Federal eRulemaking Portal, <http://www.regulations.gov>
Docket ID No. FHWA-2021-0004

Subject: FHWA-2021-0004, Proposed rulemaking on National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure

Dear Docket Manager:

The Alaska Department of Environmental Conservation (DEC) appreciates the opportunity to comment on the Federal Highway Administration's (FHWA) proposed rulemaking on National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure, published in the *Federal Register* on July 15, 2022 (87 Fed. Reg., No. 135, 42401).

Comments Overview:

This proposed rulemaking deals with the application of performance measurements to Greenhouse Gas (GHG) emissions generated by the National Highway System (NHS). More specifically, it proposes the imposition of new GHG emissions reporting requirements and reduction targets following two Executive Orders: EO 13990 (Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis) and EO 14008 (Tackling the Climate Crisis at Home and Abroad) promulgated in January 2021.

The goal of these EOs is to direct executive branch agencies, including the Federal Highway Administration (FHWA), to calculate and reduce their carbon footprint. The final goal of these calculations and reductions is to reduce the nation's overall GHG emissions by ~50% over the next eight years, bringing American emissions down to 2005 levels. By 2050, if these EOs are implemented fully, the nation would be at net-zero GHG emissions.

The primary challenge for Alaska and other states with this proposed rulemaking is the direction to State Departments of Transportation (DOTs) and Municipal Transportation Planning Offices (MPOs) to function as the primary mechanism of regulatory enforcement. This rulemaking directs

MPOs and state DOTs to place GHG reduction goals at the center of their FHWA planning, track GHG emissions, and reduce local and municipal highway emissions to follow the two EOs previously mentioned. No money is allocated by FHWA to assist states with this goal, and costs to implement this rulemaking are estimated at roughly \$12 million.

In addition, no discussion is made regarding the emissions tracking responsibility of state environmental agencies, such as the Alaska Department of Environmental Conservation (DEC), or regarding cooperation between the agencies beyond a brief mention of interagency working group formation. This rulemaking notes that only a small handful of state DOTs track GHG emissions on their road system, and a smaller number of those states has set statewide or municipal GHG emissions reduction goals.

Many state environmental agencies track GHG emissions on a yearly, triennial, or periodic basis using EPA tools such as the State Inventory Tool (SIT), and some municipalities in the nation have used the International Council for Local Environmental Initiatives (ICLEI) emissions calculation and reduction approach. EPA's community GHG tool has been used elsewhere, along with the tribal GHG toolkit, to produce on- and off-road inventory profiles by state, local, and tribal environmental agencies.

Comments will be of a general nature and address the major themes of this rulemaking, rather than addressing specific issues.

Italicized sections below are summaries of FHWA Rulemaking found in the document and are not full quotes.

Requirement for State DOTs and MPOs with NHS mileage within state geographical boundaries or municipal planning boundaries to establish declining carbon dioxide (CO₂) emissions generated by on-road mobile sources to align with administrative goals set under EOs 13990 and 14008. This goal is for state DOTs and MPOs to cut GHG emissions 50-52% by the year 2030, bringing NHS GHG emissions back to their 2005 levels, and to achieve net-zero carbon emissions by 2050. State DOTs and MPOs are given discretion to establish their own goals to reach these targets but must achieve these emissions cuts as measured on the NHS system.

Tracking measures will be implemented through the establishment of reporting requirements on 2- and 4-year reporting cycles. State DOTs must report progress towards meeting administration GHG goals following a 4-year goal setting cycle, with a 2-year progress report required. Each State DOT is to calculate its current footprint in baseline year 2021 and is to report to FHWA by October 1, 2022, its approach to setting and achieving GHG reductions through 2026, with a progress report due in 2024 tracking the meeting of these goals.

FHWA provides no financial assistance in setting or achieving these goals and establishes no punitive measures on the part of the administration for those states that fail to meet these goals.

The direction to state DOTs and MPOs to establish emissions reporting and reductions overlooks both the reporting requirements of state environmental agencies as well as the role of state and federal legislatures in setting national policy goals.

Duplicative Reporting Requirements

From the perspective of DEC, the proposed independent reporting requirement overlooks the responsibility of DEC in calculating air emissions under the terms of the 1971 Clean Air Act and its subsequent amendments. The agency works with EPA to meet statutory emissions reporting requirements under the Clean Air Act (CAA). Although DEC does not report GHG emissions to the EPA, the agency does track GHG emissions on an irregular basis and maintains emissions inventories that include on-road emissions. This data is already used to inform the EPA as to the progress of the state DOT in improving air quality impacts of on-road vehicles, such as semi-trucks and passenger vehicles.

While the current emissions reporting is for criteria pollutants, requesting that the Alaska Department of Transportation and Public Facilities (DOT&PF) and MPOs collect on-road data generates conflicts in inventory development. DEC already works closely with contractors and technical specialists to develop and maintain on-road inventories and energy audits. This is the baseline data that needs to be fed into GHG calculations to generate the needed on-road data. In addition, DEC maintains the MOVES dataset for the triennial NEI to submit to EPA. This data already includes inputs from DOT&PF which can be used to produce GHG data by DEC or its contractors.

If DOTs and MPOs must generate this data, it duplicates the collection process and bifurcates on-road reporting into criteria pollutants (DEC) and greenhouse gas (DOT&PF/MPOs) and separates the data between federal executive branch agencies. Furthermore, there is no requirement in the rule for either cooperation or data-sharing between these agencies. DEC has the tools and staff required to generate and interpret this emissions data and the expertise to identify categories of vehicles with significant or minor emissions profiles.

Lastly, for GHG reporting, many states already have mandatory greenhouse gas inventories that are generated on a regular basis. Although Alaska's inventories are produced on an infrequent basis, they are available to the public and all executive branch agencies. This includes DOT&PF as well as all other executive branch agencies. Other states, such as California and New York, maintain annual GHG reporting through their state's Department of Environmental Conservation or their local equivalent. This proposed rulemaking's reporting requirements overlap those and generate conflicting regulatory obligations for multiple agencies.

Financial Obligations and Budget Shifting to State DOTs and MPOs

In addition to potential duplicative burden on financial and time resources, FHWA is not providing any financial resources to assist with these new goals. Instead, the agency is shifting the spending priorities onto state DOTs and MPOs with the expectation they will allocate the time and resources

to complete the goals of calculating GHG emissions, producing policy approaches to reduce on-road emissions, and using policy and regulatory tools to reduce on-road emissions. As discussed, state environmental agencies already spend money to produce on-road emissions for the triennial NEI and have the tools needed to analyze these emissions. DEC encourages FHWA to reevaluate this rulemaking and revise their approach in coordination with EPA to ensure spending and reporting requirements are not duplicative of pre-existing federal and state programs.

The expectation that state DOTs and MPOs will, or can, increase their spending to meet these policy goals appears to encourage national policy approaches without going through elected legislatures. Reducing national vehicle emissions is a policy goal which should involve engagement and discussion with the national and state legislatures. Such an approach would involve those bodies' budgeting authorities, as federal and state resources would need to be spent to implement these emissions-reductions goals.

Shifting the spending burden onto state DOTs and MPOs appears to be a way to mask the complete budgeting and spending picture of this policy agenda. The state of Alaska, specifically, will be expected to allocate money through the normal legislative budgeting process for increased DOT&PF hiring for emissions calculation specialists and analysts or to contract out to generate the required GHG inventories. This does not include resources required to develop and implement the new policy approaches and regulations necessary to reduce highway emissions.

The same efforts would be expected for the Municipality of Anchorage (MOA) and the Fairbanks North Star Borough (FNSB). Both would need to provide funding for in-house emissions specialists or to hire contractors to generate this data. For the Anchorage and Fairbanks MPOs (AMATS and FAST), it is possible they may request assistance from DEC, which provides input and assistance on emissions calculation requirements through the AMATS and FAST committees. Reporting obligations would involve staff time and resources from DEC to assist in meeting FHWA policy goals without reimbursement or budgetary allocations to offset increased agency costs.

This type of spending incurs financial costs on other agencies not calculated or considered by this rulemaking. DEC encourages FHWA to reach out to MPOs and hold discussions with them regarding this rulemaking. In Alaska, particularly, this involves coordinating with AMATS and FAST to better understand the financial obligations that would be expected of them and, potentially, from DEC. Specifically, the discussions should focus on if and where MPOs would need to shift calculation requirements onto partner agencies and identify ways to offset financial costs to the partner agencies. Not doing so would generate unfunded spending obligations for those partner agencies.

Overlooking State Environmental Agencies' Reporting Responsibilities and Federal Agency Data Maintenance

This rulemaking also overlooks the responsibilities of state environmental agencies to generate and analyze emissions data like on-road GHG estimates. As discussed above, state environmental agencies have pre-existing CAA reporting obligations which require generation of on-road criteria pollutant emissions inventories. This data is given to EPA on a triennial basis as part of mandatory

reporting programs. In the case of Alaska, it would be unnecessary for DOT&PF to maintain its own set of GHG emissions. DEC could be engaged to produce this dataset through an agency data sharing agreement and assist in analyzing the data for policy suggestions.

In addition, EPA has maintained its own set of GHG data (including on-road data) since 1990 which can be accessed through the State Inventory Tool (SIT). This is based on Energy Information Administration (EIA) fuel sales and consumption data which is generated on a yearly schedule. EIA fuel consumption data would be the primary source of fuel consumption data which DEC would likely use for any on-road GHG emissions profiles. Requiring state DOTs to also produce this data would result in unnecessary data duplication.

FHWA should instead hold conversations with EPA and EIA about updating their yearly reporting programs to include needed data on national and statewide GHG emissions goals under the pair of EO referenced in this rulemaking. This would allow states to save money and staff time needed to generate a duplicate report and would encourage federal and state agencies to cooperate on overlapping goals.

Jurisdiction Over Emissions Reductions

The last category of concern is that of regulatory responsibility. In the case of DEC, the agency already has regulatory responsibility for tailpipe carbon monoxide (CO) emissions. This responsibility was established by the Alaska Legislature during the period in the 1980s and 90s when the MOA was in violation of the CAA due to CO levels. It is likely that there are other cities, states, and counties with similar regulatory responsibilities for CO and other Criteria Air Pollutants (CAPs) which generate public health consequences from on-road emissions.

It is recommended that FHWA contact state and municipal environmental agencies to discuss if and how tailpipe emissions are currently managed and if vehicle emissions are already regulated under CAA stipulations for noncompliance/nonattainment. In those instances, it may make more sense to cooperate with state and municipal agencies to work GHG reductions into vehicle emissions regulations as currently enforced. Generating a second set of vehicle emissions regulations in another agency could produce confusion among the public and regulated community.

Conclusion

In summation, while FHWA's regulatory responsibility and powers over on-road and highway emissions are well established, the agency's rulemaking overlooks several categories of potential regulatory duplication and issues with budgeting.

The agency's approach to funding this rulemaking (shifting budget allocation and program funding onto states and municipalities) represents what could constitute a violation of the Unfunded Mandates Reform Act of 1995. This act tasked federal agencies with ensuring adequate funding be provided for all new federal programs that could displace other programs through funding requirements passed onto them via administrative rulemaking. FHWA is providing no funding for this new goal, nor did it refer in this rulemaking to potential future funding to assist states with this

goal allocated by Congress. This approach could result in program displacement, where other obligations are underfunded or stripped of funding to provide resources for this new administrative rule.

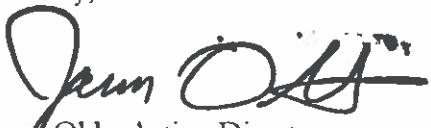
This rulemaking could also result in shifting the budgeting obligations onto third agencies, specifically state and local environmental agencies, should MPOs and state DOTs engage their partner environmental agencies in GHG calculations. As state environmental and clean air agencies are the main authorities responsible for air emissions work, they already have much of the data required to produce these reports. Such budget shifting places additional administrative and time burdens onto agencies not accounted for in this rulemaking.

The FHWA has overlooked the already existing responsibility of state environmental agencies to calculate air emissions and provide data to the EPA. Much of the data required for emissions calculation (Vehicle Miles Traveled (VMTs), fuel sales, etc.) are already collected and submitted to EPA by state environmental agencies on a triennial schedule. Requiring state DOTs and MPOs to produce this data is duplicative and unnecessary. Additionally, EPA already manages much of this data through its pre-existing databases. Having state DOTs and MPOs submit emissions reports on a biannual and four-year basis to FHWA is itself duplicative as well.

Lastly, there are likely agencies that already have administrative responsibility for tailpipe emissions. FHWA should engage in conversations with state DOTs and environmental agencies to inquire which states already have pre-existing administrative responsibilities for these emissions. In those states or municipalities with overlapping administrative responsibilities, FHWA should engage appropriate agencies with discussions about amendments or rulemaking to fulfill GHG reporting and emissions reduction obligations.

If you have any questions or need further information related to these comments, please contact me or Nick Czarnecki by email at nick.czarnecki@alaska.gov or by phone at 907-451-2007.

Sincerely,



Jason Olds, Acting Director
Division of Air Quality

cc: Jason Brune/ADEC, Commissioner
Emma Poken/ADEC, Deputy Commissioner
Nick Czarnecki/ADEC, Air Non-Point Mobile Sources Manager
Jim Plosay/ADEC, Air Permitting Program Manager
Moses Coss/ADEC, Acting Air Compliance Manager

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October 13, 2022

Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Docket no. **FHWA-2021-0004**

Submitted through the Federal eRulemaking Portal

The Arkansas Department of Transportation (ARDOT) appreciates the opportunity to submit comments on the United States Department of Transportation (USDOT), Federal Highway Administration (FHWA) Notice of Proposed Rulemaking, "National Performance Management Measures; Assessing Performance of the National Highway System; Greenhouse Gas Emissions Measure," published in the Federal Register on July 15, 2022.

ARDOT generally concurs with and supports the comments submitted by the American Association of State Highway and Transportation Officials (AASHTO) concerning this Notice. ARDOT would particularly like to emphasize the following four AASHTO comments.

- While remaining supportive of the federal performance management provisions enacted under MAP-21 and the FAST Act, we continue to resist the establishment of national-level performance measures beyond those explicitly authorized by statute.
- The national goals for greenhouse gas (GHG) emissions reduction, while laudable, are aspirational in nature, and requiring states to set declining targets to align with aspirational goals is inconsistent with past FHWA guidance that performance targets should be realistic and data-driven.
- The selection of a pandemic year as the baseline for this measure creates an artificial starting point for target setting, which is particularly problematic given the requirement to set declining targets.
- The timeline for implementing the proposed rule (which began before the deadline for these comments) is not realistic in that it does not acknowledge the time and resources necessary for State Departments of Transportation and Metropolitan Planning Organizations to assimilate the proposed rule within existing performance management frameworks, develop data-driven processes for establishing targets, and collaborate on target setting.

Thank you for your consideration of these comments. We look forward to continuing our work with the USDOT on these issues. If additional information is needed, please advise.

Sincerely,

A handwritten signature in blue ink that reads "Lorie H. Tudor".

Lorie H. Tudor, P.E.
Director

c: Deputy Director and Chief Operating Officer
Deputy Director and Chief Engineer
Assistant Chief Engineer – Planning
Governmental Relations

Program Management
Transportation Planning and Policy
FHWA – Arkansas Division
AASHTO

FHWA004231



Florida Department of Transportation

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JARED W. PERDUE, P.E.
SECRETARY

October 13, 2022

Docket Management Facility
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Re: National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure, Docket No. FHWA-2021-0004

The Florida Department of Transportation (FDOT) appreciates the opportunity to comment on the Federal Highway Administration's (FHWA) Notice of Proposed Rulemaking on National Performance Management Measures, Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure (Docket No. FHWA-2021-0004).

FDOT and our transportation partners, including Florida's 27 Metropolitan Planning Organizations (MPOs), have a long history of measuring the performance of the transportation system and adapting policies, plans, and programs to help accomplish performance goals. Florida law establishes a framework for transportation performance management, with FDOT policy linking performance measures to planning and programming decision making. This ensures informed decisions on transportation system performance, agency operations, and program outcomes.

While the intent of the proposed rule is important, the implementation of the proposed rule is also important. Federal regulations should not burden states with overreaching or unnecessary requirements that may impact successful implementation. FDOT strongly encourages FHWA to consider this balance as it moves forward in the rulemaking process.

Instead of prescriptive targets and timelines, FDOT recommends FHWA allow states flexibility to make decisions based on the needs of their communities. Regulations should be broad enough to include the unique current characteristics and evolving conditions of all 50 states.

Docket Management Facility
October 13, 2022

Authority to Establish the GHG Measure

FDOT is concerned that FHWA relied upon an overly broad interpretation of 23 U.S.C. 150 to justify its legal authority for establishment of this rule. In 23 U.S.C. 150(c), Congress used clear language to direct USDOT to establish performance measures to assess pavement condition, bridge condition, system performance, serious injuries and fatalities, and, for the CMAQ program, traffic congestion and on-road mobile source emissions. Congress also stated that the USDOT Secretary shall limit performance measures to those described in the subsection. Notably absent from this section is a reference to GHGs. Furthermore, the national goals identified in 23 U.S.C. 150(b)(6), which FHWA also relies upon for legal justification, do not explicitly address reducing GHG emissions.

When Congress passed the Infrastructure Investment and Jobs Act (IIJA) less than one year ago it did not add a GHG performance measure to 23 U.S.C. 150(c) or expand upon the national goals. Congress did create new programs in IIJA that provide funding for and incentivize state DOTs and MPOs to develop carbon reduction strategies and implement projects accordingly. However, IIJA did not include a mandate that state DOTs or MPOs track on-road GHG tailpipe emissions or otherwise achieve year over year reductions in GHG emissions from on-road vehicles. Had Congress intended to require a GHG performance measure, the IIJA would have provided the opportunity to do so.

Timing of Proposed Target setting and Reporting Requirements

The proposed rule would require that state departments of transportation establish initial targets for greenhouse gas (GHG) performance measures no later than October 1, 2022. Comments on the proposed rule are due October 13, 2022, 12 days AFTER the deadline for target setting. It is impractical to require states to set targets before a rule is promulgated.

In order to establish targets, states must gather data, analyze, and calculate historic trends, coordinate among various functional areas, and review policy. The proposed measure requires the use of data sets controlled by FHWA, which are not currently available to state DOTs. Additionally, state DOTs are required by the proposed rule to coordinate the state performance targets with their metropolitan planning organizations. In the case of Florida, coordinating with 27 MPOs on new performance targets requires several months of collaboration.

Other rules requiring performance measures and targets provided at least one year for states to coordinate and establish state targets. Florida strongly encourages FHWA to extend the target-setting deadline and to consider alignment with the schedule that already exists for pavement and bridge conditions and mobility measures.

Declining Targets and Target Timeframes

As the nation's third most populous state, Florida's population is projected to grow from 21.5 million residents in 2020 to 27.8 million residents by 2050. Out-of-state visitors to Florida are projected to increase 55 percent between 2019 and 2031. Florida continues to experience growth in vehicle miles traveled (VMT), as a result of the growth in population and visitors. The proposed rule requires that states set declining targets from an established baseline, to show

Docket Management Facility
October 13, 2022

improvements in GHG emissions. Realistically, this presents a challenge when VMT is increasing and population is growing, especially for 2- and 4-year targets.

A GHG performance measure expressed as a rate of emissions to VMT, or population would provide better context. States should not be penalized for population or economic growth.

By requiring declining targets, FHWA goes well beyond the statutory requirement in 23 U.S.C. 150(d) that “each State shall set performance targets that reflect the measures” promulgated by FHWA. The statute makes no reference to improving, declining, or constant targets. In effect, the requirement for declining targets inserts FHWA into the target setting role that is provided to states. It is more reasonable to maintain that states have the full ability to establish realistic, data-driven targets, whether they be improving or declining.

The most promising strategies to affect reductions in on-road tailpipe emissions are those that will take more time to build, implement, or adopt. States will have little influence to achieve progress toward short-term, 2- and 4-year targets.

FHWA is also proposing 8- and 20-year targets, which are more realistic. FDOT prefers 8- and 20-year targets over 2- and 4-year targets and respectfully suggests that the establishment of four separate targets for four time periods is overreach and a burden to states.

Reference Year

FDOT is concerned about the use of 2021 as the reference year due to the Covid-19 pandemic. VMT in Florida, both total and NHS, dropped significantly from 2019 to 2020. While VMT rebounded in 2021 to a level slightly above 2019, it was below the trajectory it was on prior to the start of the pandemic. This suggests that additional rebound is likely in 2022 and beyond. Thus, the use of 2021 as a baseline is not likely to reflect ongoing system performance over the next few years. We recommend that FHWA evaluate other options for the reference year to assess the impacts on target achievement.

MPO Requirements

The proposed rule requires MPOs to establish GHG targets for their MPO area, as well as for urbanized areas that may cross MPO jurisdictions (Figure 1). Creating 2-, 4-, 8-, and 20-year targets for the state, 27 MPOs, and at least 10 urbanized areas would mean at least 115 new targets for Florida. Not only does this create undue burden for the MPOs; it also creates undue burden for FDOT. FDOT monitors and tracks performance measures and targets for all federal measures for its 27 MPOs as part of its oversight responsibilities.

The proposed rule requires state DOT to review and, in essence, approve, the MPOs’ approach to calculating metrics and targets. For FDOT, this means potentially validating 27 different approaches to GHG calculations.

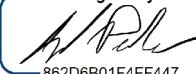
Given transportation emissions are not physically contained within a jurisdictional boundary, it is unclear how performance targets specific to an urbanized area will create improvements above those coming from performance targets specific to an MPO area. The proposed rule should

Docket Management Facility
October 13, 2022

provide limited options for metrics, with any validation responsibility assigned to FHWA, and should not require targets for BOTH urbanized areas and MPO areas.

Thank you for the opportunity to provide these comments. Please do not hesitate to contact FDOT in regards to any of or comments. Your main point of contact will be Brad Thoburn, Assistant Secretary of Strategic Development. You can contact him by email at brad.thoburn@dot.state.fl.us or by phone at 850-414-5235.

Sincerely,

DocuSigned by:

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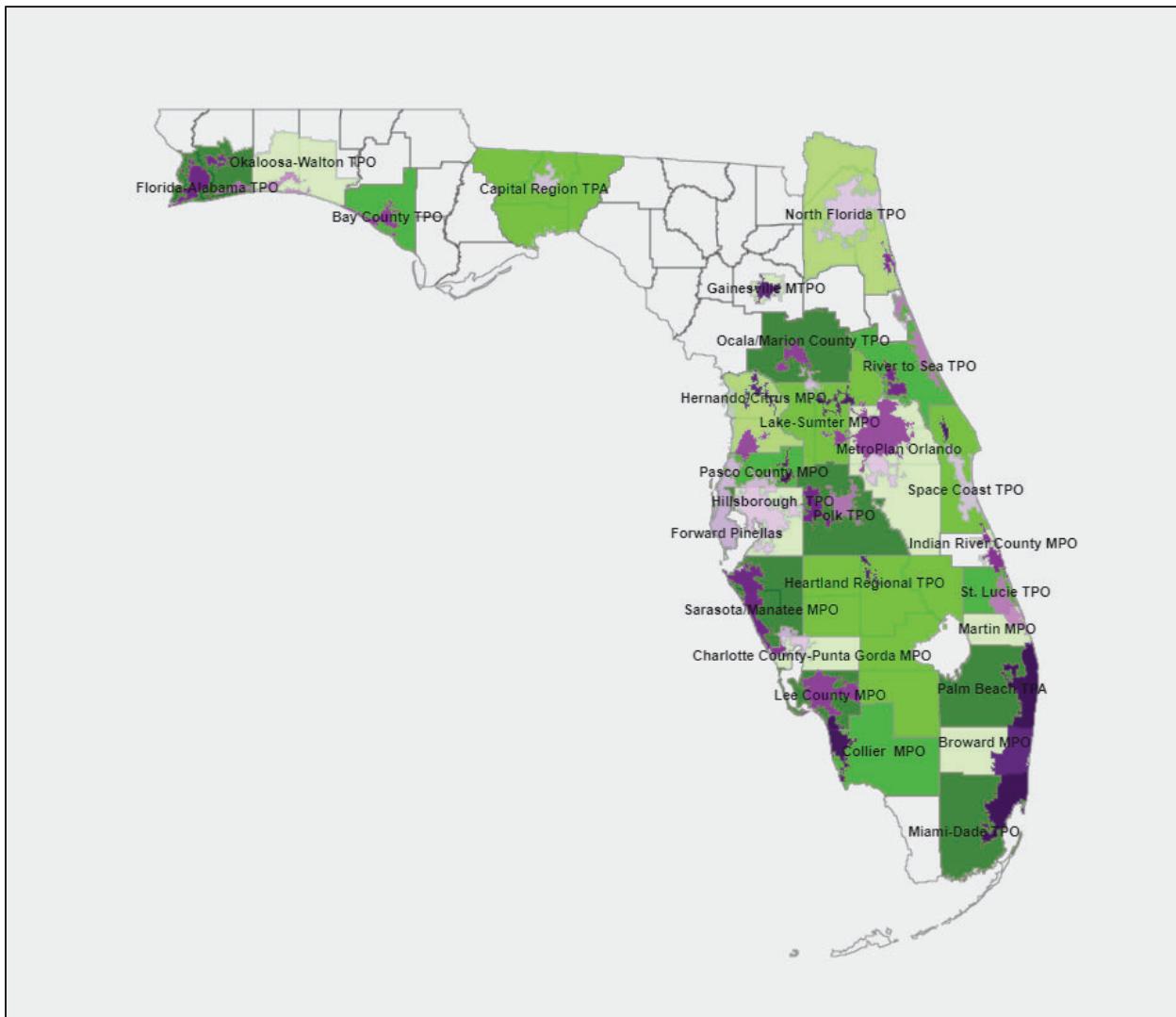
Jared W. Perdue, P.E., Secretary
Florida Department of Transportation

JP:drs

Enclosures: Florida Urbanized Areas and MPO Boundaries

Figure 1 - Florida Urbanized Areas and MPO Boundaries

(Urbanized areas shown in light to dark purple. MPOs shown in light to dark green.)



State DOT: Nebraska DOT

Name: Ryan Huff

Contact Information: ryan.huff@nebraska.gov

Part I: Overarching State DOT Comments

Please provide any overarching comments you/your state has regarding the FHWA GHG NPRM.

The Nebraska DOT strives to be efficient, effective, and transparent in the delivery of products and services to the customers it serves. Which is why the NDOT is a strong supporter of performance management practices and generally supports efforts to understand performance. However, the National GHG NPRM does not provide a sufficient framework for tackling GHG emissions reduction in a meaningful way for Nebraska. Nebraska is a rural state which means it has little congestion and low population density. As a result, there are few things it can do to decrease an already low amount of GHGs. Furthermore, there are many other meaningful programs that could be measured that directly effect GHG emissions (such as NEVI, congestion mitigation and transit to name a few). Lastly, GHG emissions by passenger vehicles and trucks on the NHS is a very low percentage of the total GHG emissions in the U.S.¹ With all these things in mind, the creation of a GHG Measure, and the associated reporting requirements, creates unnecessary burdens with little appreciable benefits for a state like Nebraska. The NDOT feels that State DOTs should be allowed to manage performance of GHGs in their own way and be accountable to the taxpayers they individually serve.

1. <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation>

Part II: FHWA General Comments from the NRPM

Establishing Targets That Lead to Improved Environmental Performance

1. FHWA encourages comments that address whether the proposed measure would support those national policies [GHG emissions reductions of 50 to 52 percent below 2005 levels by 2030 and for the U.S. to achieve net-zero emissions by 2050.], the ways in which the proposed measure would do so or why it would not, and whether the final rule should contain any other provisions to better support those national policies. (p66)
 - a. Will the measure help the nation achieve its GHG reduction goals? Why or why not?
 - i. In III, C, 1; the text describes how a GHG measure was repealed back in 2018 and gives the reasons. Then, the text goes on to say that the reasons for repealing were wrong. It further states that there are very definite benefits to measuring and reporting GHG performance, mainly awareness benefits. Yet, the very last statement says, "*These benefits are not easily quantifiable.*" So, if they are not quantifiable; how can the benefits be anything but speculative? Which is what the 2018 repeal justification was based on. If there is no new concrete evidence that the 2018 repeal was in error, then the original 2018 ruling should stand. Overall, the Nebraska DOT does not agree with the justification provided in the rule. Furthermore, there is no new evidence to say that this rule would contribute to the achievement of the national goals of reducing GHG emissions. As a result, the NDOT does not believe the new rule will contribute to the national GHG emissions reduction goals.
 - ii. Also, the influence of transportation on GHG emissions and the State DOT's control over it may be negligible. According to the EPA, the transportation sector is responsible for 27% of GHG emissions in 2020 (<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#transportation>). Of the 27%, its reasonable to assume that only a small portion of all transportation emissions are related to things the State DOTs can influence, namely vehicle traffic on the NHS. For example, if half of these emissions are created by passenger vehicles and trucks (the others being aviation and others), and we assume that 55% of all vehicles miles traveled (VMT) is on the national highway system (NHS), then that means that only 7.5% of all GHG emissions in the U.S. are related to vehicles on the NHS ($0.27 * 0.5 * 0.55 = 0.075$). With these things in mind, the actions of the State DOTs will have limited effect on the totality of GHG emissions in the U.S.
 - iii. The NDOT does not think there are any ways to improve this rule and instead, it should be changed to focus on the measurement of more tactical activities as surrogates for GHG emissions. I.e. performance and targets related to the effectiveness of transit programs, or congestions management activities. The proposed measure is based on an overly simplistic calculation with no way to judge the sensitivity of the DOT's actions and their effects on GHG emissions.
2. FHWA encourages comments on how to structure improving targets for the GHG measure, as well as the associated reporting and significant progress requirements in 23 CFR Part 490, Subpart A. F (67)

- a. How should “improving targets” be handled in this rule? Also, how should reporting and ‘significant progress’ be determined?
 - i. Part III, D says that *“This proposed measure would require State DOTs and MPOs to establish declining targets for GHG emissions from such sources to achieve the national goals for 2030 and 2050.”* The requirement that targets be declining is arbitrary. Best practices in performance management are to set targets in accordance with the historic trend, along with the factors that will influence the trend’s trajectory. Setting a target to decline in the absence of these things does not serve the intended purpose of performance management. All it will do is set unrealistic expectations and create frustration with the process and its participants. In the end, the intent of the exercise will be undermined, and stakeholders will lose confidence in the process. The State DOT’s should be allowed to set targets that make sense for them and their situation.
 - ii. If the DOT does not make significant progress toward their target; *“the State DOT shall document the actions it will take to achieve the target for the GHG measure.”* While this is a fairly light burden; the exercise itself will not result in any meaningful change to target achievement. This is because state DOTs have limited ways to influence GHG emissions reductions. These include congestion management programs and projects, which in Nebraska’s case are limited in scope (because traffic congestion is limited in Nebraska). One could argue that NEVI program activities can *indirectly* influence GHG emissions; but beyond these things, there is a limited number of things State DOTs can do to directly influence GHG performance (at least significantly). As a result, a failure to achieve significant progress toward the target will result in a report full of vague and ambiguous activities that may or may not influence future target achievement.
- 3. are there any specific ways the proposed GHG measure could be implemented within the framework of TPM to better support emissions reductions to achieve national policies for reductions in total U.S. GHG emissions? (p68)
 - a. How could this measure be leveraged with other programs and measures to achieve national GHG reduction goals?
 - i. There may be potential to tie this back to the NEVI formula and grant programs. The rulemaking states that *“Achieving CO2 reductions of this magnitude will depend on actions such as increasing the adoption of zero emission vehicles, improving system efficiency, and reducing the growth in future on-road travel activity through the shift from single occupant vehicles and other measures that reduce on-road travel demand.”* Regarding the *“adoption of zero emission vehicles”*, the NEVI programs may induce greater adoption of these types of vehicles. In which case, it would be easier to gauge reduction in GHG emissions indirectly by measuring aspects of the NEVI program. Things like hours charged, KW distributed, number of stations, etc., could all serve to indirectly describe reduced GHG emissions. These are tangible “levers the DOT can pull” to help reduce GHG emissions.

4. What changes to the proposed measure or its implementation in TPM could better the impact of transportation decisions on CO2 emissions, and enable States to achieve tailpipe CO2 emissions reductions necessary to achieve national targets? (p68)
 - a. **What should be changed about this measure and its implementation to have greater impact on the national GHG reduction goals?**
 - i. The way the measure is calculated is overly simplistic and may not fully serve to achieve its intended benefit (AASHTO and others have observed the limitations of the calculations and will provide a more detailed explanation). Furthermore, the measurement and reporting requirements are not limited to areas with high GHG emissions (i.e. urban areas). The actions that decrease GHG emissions, described within the rulemaking, are things that do not make sense for rural areas. I.e. increased adoption of zero emissions vehicles, shifts from single occupancy vehicles and system efficiency. In rural areas, infrastructure for zero emissions vehicles is not mature and it will be a long time before programs like NEVI permeate rural areas. Furthermore, rural drivers must drive longer distances to their destinations and public transit is not always an available or convenient option. Lastly, the efficiency of road systems (i.e. reducing congestion) is a non-issue in rural areas. For these reasons, the measure should at least be limited to where population density is high (if required at all). This is where transit options make the most sense, congestion is present, and the infrastructure for zero emission vehicles makes greater economic sense. Also, the rule should consider allowing states within air quality attainment standards to be exempted from measuring and reporting on GHG emissions. I.e. reward those states that already fare well in terms of air quality.
5. In instances that MPOs are establishing a joint urbanized area target, should FHWA require that the individual MPO-wide targets be the same as the jointly established urbanized area target? (p68)
 - a. **No Comment – intended for MPOs**
6. Should MPOs that establish a joint urbanized area target be exempt from establishing individual MPO-level targets, and instead only be required to adopt and support the joint urbanized area target? (p68)
 - a. **No Comment – intended for MPOs**
7. In cases where there are multiple MPOs with boundaries that overlap any portion of an urbanized area, and that urbanized area contains NHS mileage, should each of those MPOs establish their own targets, with no requirement for a joint urbanized area target? (p68)
 - a. **No Comment – intended for MPOs**
8. Are there other approaches to target setting in urbanized areas served by multiple MPOs that would better help MPOs reach net-zero emissions? (p69)
 - a. **No Comment – intended for MPOs**

Summary of and Request for Comments on the Regulatory Impact Analysis

1. The RIA includes assumptions regarding the applicability, level of effort and frequency of activities under proposed Sections 490.105, 490.107, 490.109, 490.511, and 490.513. Are these assumptions reasonable? Are there circumstances that may result in greater or lesser burden relative to the RIA assumptions?
 - a. The requirement is that the state DOT represent all roads regardless of ownership. If this is the case, the state DOT may be limited in what it can do to set and achieve declining targets, since it may not have jurisdiction over roads represented in the performance data.
 - b. Timeline: The rule says that State DOTs will need to submit by October 1, 2022; yet the rule won't be closed until after this deadline. The NDOT would echo comments submitted by AASHTO. The FHWA should consider delaying the submission date to something more reasonable.
2. Would the staff time spent implementing this measure reduce the burden of carrying out other aspects of State DOT and MPO missions, such as forecasting fuel tax revenues? If so, please describe and provide any information on programs that would benefit from this measure and estimate any costs that would be reduced by implementing this measure.
 - a. Will this reduce other types of work at the State DOT?
 - i. The Nebraska DOT does not currently measure, monitor or report on GHG emissions (directly or indirectly), nor their impact on things like fuel tax revenue. As a result, the new rule/measure will not benefit any of its programs.
3. Would the proposed rule result in economies of scale or other efficiencies, such as the development of consulting services or specialized tools that would lower the cost of implementation? If so, please describe such efficiencies and provide any information on potential cost savings.
 - a. Would the measure create any efficiencies for State DOTs (in terms of efforts its already engaged in)?
 - i. The Nebraska DOT does not currently measure, monitor or report on GHG emissions (directly or indirectly). As a result, the new rule/measure will not reduce any costs for the NDOT.
 - ii. The schedule of dates may be hard to satisfy depending on the speed of the rulemaking. The NDOT would echo comments submitted by AASHTO. The FHWA should consider delaying the submission date to something more reasonable.
4. Would the proposed rule result in the qualitative benefits identified in the RIA, including more informed decision-making, greater accountability, and progress on National Transportation Goals identified in MAP-21? Would the proposed rule result in other benefits or costs? Would the proposed measure change transportation investment decisions and if so, in what ways? For State DOTs and MPOs that have already implemented their own GHG measure(s), FHWA welcomes information on the impact and effectiveness of their GHG emissions measure(s).
 - a. Are there any qualitative benefits to the proposed rule? Are there any costs associated with the new rule? Will the rule change or influence decision making? How?
 - i. In III, C, 1, it says "Achieving CO2 reductions of this magnitude will depend on actions such as increasing the adoption of zero emission vehicles, improving

system efficiency, and reducing the growth in future on-road travel activity through the shift from single occupant vehicles and other measures that reduce on-road travel demand. Actions such as these are significantly influenced by the planning activities and investment decisions of State DOTs and MPOs".

The Nebraska DOT does not fully agree with the emphasized statement. The State DOTs do not directly influence the adoption of zero emission vehicles through any of its activities. One might argue that the NEVI programs may *induce* the adoption of zero emissions vehicles; but car companies have much more control over this. Furthermore, the shift from single occupant vehicles is something primarily influenced by land use policies and population density (controlled by local governments). The only thing the NDOT can work to influence directly is congestion on the highways it manages and maintains. In which case, the NDOT is already measuring congestion and working to alleviate it through its existing practices. So this measure is an unnecessary way to describe what the State DOTs know about congestion on their systems.

- ii. Part of the justification in III, C, 1 states that measuring, reporting and creating targets creates transparency and allows the public to interact with the State DOT in how it pursues action to combat GHG emissions. Unfortunately, there isn't much state DOTs can do to influence emissions, other than through congestion reducing programs and projects (see previous comment). The State DOTs already actively monitors congestion and works to address it through other publicly accessible activities. Projects, programs and plans all have public hearings or other stakeholder driven activities. These activities provide the forum where things like air quality and emissions can be discussed. As a result, the addition of this rule will arguably serve to add unnecessary, non-value add work for the State DOT's and MPOs.
- iii. Part III, C, 1 argues that the implementation will cost less than what was originally estimated in the 2018 repeal. Whether it's less or not still misses the points that NDOT outlines in previous comments; which is that there are limited things the State DOT can do to impact GHG performance. Where it can, the NDOT already works to indirectly address GHG performance through its preexisting practices. As a result, **any** cost increase would negatively impact the State DOT.
- iv. In III, C, 2, the section describes how a survey found that very few State DOTs are measuring GHG emissions. The results are indicative of the State's attitude toward its role in the management of GHG emissions. For one, it could mean that the states don't see the value of such a measure. Alternatively, they can't see how they could influence GHG emissions. Overall, State DOTs answer to their customers and elected officials. As a result, transparency and accountability activities are baked into everything they do. If the customers of the State DOTs saw this as valuable, the State DOTs would begin doing these things. This is why some State DOTs monitor and report GHG performance voluntarily. Overall, State DOTs do not work in a vacuum without accountability. They balance and adjust priorities and activities over time to

conform to the values of the customers and elected officials they serve. This rule would arbitrarily usurp the place of the State DOT's customers to make them do something their actual customers didn't ask them to do. The Nebraska DOT believes the rule is unnecessary for the many reasons described previously.

- v. With respect to decision making, the GHG measure calculation is based on fuel consumption and a factor. As a result, there is no way for the State DOT to understand which "levers they pull" are resulting in reduced emissions. In other words, there is no way to judge the sensitivity of the DOT's actions and their effects on GHG emissions. As a result, the NDOT does not believe this rule/measure will influence decision making in any meaningful way.

Part III: Proposed Regulatory Language

490.101 Definitions

Fuels and Financial Analysis System-Highways (FUELS/FASH) as used in this part means the FHWA's system of record for motor fuel, highway program funding, licensed drivers, and registered vehicles data.

Net-zero as used in this part means that human activities produce no more greenhouse gases than they remove from the atmosphere.

490.105 Establishment of performance targets

(d) *Target scope.* Targets established by State DOTs and MPOs shall, regardless of ownership, represent the transportation network or geographic area, including bridges that cross State borders, that are applicable to the measures as specified in paragraphs (d)(1), (2), and (4) of this section.

(4) MPOs shall establish targets for the GHG measure specified in § 490.507(b) that represent performance of the transportation network specified in § 490.503(a)(2), for urbanized areas meeting the criteria specified in paragraph (f)(10) of this section.

(1) *Schedule.* State DOTs shall establish targets not later than the due dates provided in paragraphs (e)(1)(i) and (e)(1)(ii) of this section, and for each performance period thereafter, in a manner that allows for the time needed to meet the requirements specified in this section and so that the final targets are submitted to FHWA by the due date provided in § 490.107(b).

(i) State DOTs shall establish initial targets not later than May 20, 2018, except as provided in paragraph (e)(1)(ii) of this section.

(ii) State DOTs shall establish initial targets for the GHG measure identified in § 490.507(b) not later than October 1, 2022.

(10) *Targets for the GHG measure.* Targets established for the GHG measure in paragraph (c)(5) of this section shall be declining targets for reducing tailpipe CO₂ emissions on the NHS, that demonstrate reductions toward net-zero targets.

(i) The MPOs shall establish 4-year targets, described in paragraph (e)(4)(iv) of this section, for all applicable measures, described in paragraphs (c) and (d) of this section. For the GHG measure described in (c)(5) of this section, the targets established shall be declining targets for reducing tailpipe CO₂ emissions on the NHS.

(3) *Target establishment options.* For each performance measure identified in paragraph (c) of this section, except the CMAQ Traffic Congestion measures in paragraph (f)(5) of this section, MPOs meeting the criteria under paragraph (f)(6)(iii) of this section for Total Emissions Reduction measure, the MPOs shall establish targets for the metropolitan planning area by either:

(i) Agreeing to plan and program projects so that they contribute toward the accomplishment of the relevant State DOT target for that performance measure; or

(ii) Committing to a quantifiable target for that performance measure for their metropolitan planning area.

(10) *Joint Targets for the GHG Measure.* Where an urbanized area contains mainline highways on the NHS, and any portion of that urbanized area is overlapped by the metropolitan planning area boundaries of two or more MPOs, those MPOs shall collectively establish a single joint 4-year target for that urbanized area, described in paragraph (e)(4)(iv) of this section. This joint target is in addition to the targets for the metropolitan planning area required in paragraph (f)(1)(i) of this section.

(i) NHS designations and urbanized areas shall be determined from the data, contained in HPMS, 1 year before the State DOT Baseline Performance Period Report is due to FHWA.

(ii) Only one target shall be established for the entire urbanized area regardless of roadway ownership. In accordance with paragraph (f)(9) of this section, each MPO shall report the joint target for the urbanized area.

(iii) The target established for each urbanized area shall represent a quantifiable target for that urbanized area.

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1. FHWA requests comment on what the due date should be in the event a final rule is not effective in advance of the October 1, 2022, reporting date. As stated elsewhere in this proposal, FHWA also will consider public comments to establish a GHG measure for States and MPOs in a final rule based on this proposed rule. (p48)
 2. FHWA encourages submission of comments on the type of target setting requirements that would best help MPOs improve the environmental performance of their transportation systems with respect to GHG emissions. (p50)
 3. FHWA encourages submission of comments on the important issue of how targets established by State DOTs and MPOs for reduced emissions might be implemented in order to lead to improved environmental performance. (p53)

490.107 Reporting on performance targets.

(1) *Baseline Performance Period Report—(i) * * * State DOTs shall submit their first Baseline Performance Period Report to FHWA by October 1, 2018, and subsequent Baseline Performance Period Reports to FHWA by October 1st every 4 years thereafter, except for the GHG measure specified in § 490.105(c)(5), State DOTs shall submit their first Baseline Performance Period Report to FHWA by October 1, 2022, and subsequent Baseline Performance Period Reports to FHWA by October 1st every 4 years thereafter.*

(H) GHG metric for the GHG measure. Tailpipe CO₂ emissions on the NHS, as described in § 490.511(f), for the reference year and the 2 calendar years preceding the Baseline Performance Period Report, and tailpipe CO₂ emissions on all public roads for the reference year and the 2 calendar years preceding the Baseline Performance Period Report.

*(2) Mid Performance Period Progress Report—(i) * * * State DOTs shall submit their first Mid Performance Period Progress Report to FHWA by October 1, 2020, and subsequent Mid Performance Period Progress Reports to FHWA by October 1st every 4 years thereafter, except for the GHG measure specified in § 490.105(c)(5), State DOTs shall submit their first Mid Performance Period Progress Report to FHWA by October 1, 2024, and subsequent Mid Performance Period Progress Reports to FHWA by October 1st every 4 years thereafter.*

(J) GHG metric for the GHG measure. Tailpipe CO₂ emissions for the NHS and all public roads, as described in § 490.511(f), for the 2 calendar years preceding the Mid Performance Period Progress Report for the GHG measure in § 490.105(c)(5).

*(b)(3) Full Performance Period Progress Report—(i) * * * State DOTs shall submit their first Full Performance Period Progress Report to FHWA by October 1, 2022, and subsequent Full Performance Period Progress Reports to FHWA by October 1st every 4 years thereafter, except for the GHG measure specified in § 490.105(c)(5), State DOTs shall submit their first Full Performance Period Progress Report to FHWA by October 1, 2026, and subsequent Full Performance Period Progress Reports to FHWA by October 1st every 4 years thereafter.*

*(ii) * * * (I) GHG metric for the GHG measure. Tailpipe CO₂ emissions for the NHS and all public roads, as described in § 490.511(f), for the 2 calendar years preceding the Full Performance Period Progress Report for the GHG measure in § 490.105(c)(5).*

*(2) * * * For the GHG measure in § 490.105(c)(5), the MPO shall report a description of its metric calculation method, as described in § 490.511(d), and the calculation of tailpipe CO₂ emissions for the NHS and all public roads.*

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1. FHWA requests comment on whether MPOs should be required to provide the metric calculation method and their tailpipe CO₂ emissions to the State DOT outside of the system performance report to provide for more frequent information sharing. (p57)
 2. FHWA also requests comment on whether to specify a uniform metric calculation method for MPOs, as opposed to allowing a range of approaches that are referenced in the description of § 490.511. (p57)

490.109 Assessing significant progress toward achieving the performance targets for the National Highway Performance Program and the National Highway Freight Program.

(v) *Data contained within FUELS/FASH on August 15th of the year in which the significant progress determination is made that represents performance from the prior year and for the reference year for targets established for the GHG measure in § 490.105(c)(5);*

(vi) *Baseline condition/performance data contained in FUELS/FASH, HPMS, and NBI of the year in which the Baseline Period Performance Report is due to FHWA that represents baseline conditions/performances for the performance period for the measures in §§ 490.105(c)(1) through (5).*

(vii) *Data contained within the HPMS on August 15th of the year in which the significant progress determination is made that represents performance from the prior year and for the reference year for targets established for the GHG measure specified in § 490.105(c)(5).*

(f) *Performance achievement. (1) * * **

(v) *If significant progress is not made for the target established for the GHG measure in § 490.105(c)(5), then the State DOT shall document the actions it will take to achieve the target for the GHG measure.*

490.503 Applicability

(2) *The Greenhouse Gas (GHG) measure in § 490.507(b) is applicable to all mainline highways on the Interstate and non-Interstate NHS.*

490.505 Definitions

Greenhouse gas (GHG) is any gas that absorbs infrared radiation (traps heat) in the atmosphere. Ninety-seven percent of on-road GHG emissions are carbon dioxide (CO₂) from burning fossil fuel. Other transportation GHGs are methane (CH₄), nitrous oxide (N₂O), and hydrofluorocarbons (HFCs).

Reference year is calendar year 2021 for the purpose of the GHG measure.

490.507 National performance management measures for system performance

There are three performance measures to assess the performance of the Interstate System and the performance of the non-Interstate NHS for the purpose of carrying out the National Highway Performance Program (referred to collectively as the NHS Performance measures).

(b) One measure is used to assess GHG emissions, which is the percent change in tailpipe CO₂ emissions on the NHS compared to the reference year (referred to as the GHG measure).

490.509 Data requirements.

(f) The FHWA will post on the FHWA Website, no later than August 15th each year, the CO₂ factor for each on-road fuel type that will be used to calculate the GHG metric for the GHG measure in § 490.105(c)(5).

(g) Fuel sales information needed to calculate the fuel consumed for the GHG measure in § 490.507(b) shall:

- (1) Represent the total number of gallons of fuel consumed by fuel type; and
- (2) Be based on fuels sales data for the previous calendar year, and reported to FUELS/FASH.

(h) Annual total vehicle-miles traveled (VMT) needed to calculate the GHG measure in § 490.507(b) shall come from HPMS data as of August 15, for the prior calendar year.

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1. FHWA requests comments on any U.S. Government emissions factors or calculation methods that may be useful. (p63)

490.511 Calculation of National Highway System performance metrics.

(2) *Annual Total Tailpipe CO₂ Emissions on the NHS for the GHG measure in § 490.507(b) (referred to as the GHG metric).*

(c) *Tailpipe CO₂ emissions on the NHS for a given year shall be computed in million metric tons (mmt) and rounded to the nearest hundredth as follows:*

$$\text{(Tailpipe CO}_2\text{Emissions on NHS)}_{CY} = \left(\sum_{t=1}^T (\text{Fuel Consumed})_t \times (\text{CO}_2\text{Factor})_t \right) \times \left(\frac{\text{NHS VMT}}{\text{Total VMT}} \right)$$

Where:

(Tailpipe CO₂ Emissions on NHS)_{CY}= Total tailpipe CO₂ emissions on the NHS in a calendar year (expressed in mmt, and rounded to the nearest hundredth);

T= the total number of on-road fuel types;

t= an on-road fuel type;

(Fuel Consumed)_t= the quantity of total annual fuel consumed for on-road fuel type "t" (to the nearest thousand gallons);

(CO₂ Factor)_t= is the amount of CO₂ released per unit of fuel consumed for on-road fuel type "t";

NHS VMT = annual total vehicle-miles traveled on NHS (to the nearest one million vehicle-miles); and

Total VMT= annual total vehicle-miles traveled on all public roads (to the nearest one million vehicle-miles).

(d) *For the GHG measure specified in § 490.507(b), MPOs are granted additional flexibility in how they calculate the GHG metric, described in § 490.511(a)(2). MPOs may use the MPO share of the State's VMT as a proxy for the MPO share of CO₂ emissions in the State, VMT estimates along with MOVES45 emissions factors, FHWA's Energy and Emissions Reduction Policy Analysis Tool (EERPAT) model, or other method the MPO can demonstrate has valid and useful results for CO₂ measurement. The metric calculation method shall be mutually agreed upon by both the State DOT and the MPO.*

(f) *Tailpipe CO₂ emissions generated by on-road sources travelling on the NHS (the GHG metric), and generated by on-road sources travelling on all roadways (the step in the calculation prior to computing the GHG metric) shall be calculated as specified in paragraph (c) of this section. The calculations shall be reported in the State Biennial Performance Reports, as required in § 490.107, and shall address the following time periods.*

(1) *The reference year, as required in § 490.107(b)(1)(ii)(H); and*

(2) *The 2 years preceding the reporting years, as required in § 490.107(b)(1)(ii)(H), (b)(2)(ii)(J) and (b)(3)(ii)(I).*

490.513 Calculation of National Highway System performance measures.

(d) The GHG measure specified in § 490.507(b) shall be computed to the nearest tenth of a percent as follows:

$$\frac{(\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{CY}} - (\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{reference year}}}{(\text{Tailpipe CO}_2\text{Emissions on NHS})_{\text{reference year}}} \times 100$$

Where:

(Tailpipe CO₂ Emissions on NHS) CY = total tailpipe CO₂ emissions on the NHS in a calendar year (expressed in million metric tons (mmt), and rounded to the nearest hundredth); and

(Tailpipe CO₂ Emissions on NHS) reference year = total tailpipe CO₂ emissions on the NHS in calendar year 2021 (expressed in million metric tons (mmt), and rounded to the nearest hundredth).



October 13, 2022

Ms. Stephanie Pollack
 Acting Administrator, Federal Highway Administration
 United States Department of Transportation
 1200 New Jersey Ave SE
 Washington, DC 20590

Subject: National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure (Docket No. FHWA-2021-0004)

Dear Ms. Pollack:

The Oklahoma Department of Transportation (ODOT) is providing comments herein on the Federal Highway Administrations (FHWA) Notice of Proposed Rulemaking (NPRM) on “National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure (Docket No. FHWA-2021-0004)”, published in the Federal Register on July 15, 2022. The NPRM intends to require state departments of transportation (State DOTs) and metropolitan planning organizations (MPOs) to establish declining carbon dioxide (CO₂) targets and to establish a method for the measurement and reporting of greenhouse gas (GHG) emissions, and FHWA is proposing that “performance” of the Interstate and non-Interstate NHS under 23 U.S.C.150(c) includes environmental performance.

As captured in the Oklahoma Attorney General’s objections based in legal analysis, also provided to the Federal Register in response to this NPRM, ODOT agrees that:

1. the FHWA has no statutory authority to establish the GHG Performance Measures ...because it is not permissible under 23 § 119(d)(1)(A) and § 150(c). FHWA can only adopt performance measures described by Congress, and Congress did not give unbounded authority to adopt any measure related to the NHS, nor did Congress include greenhouse gas measures in permissible projects under Section 119 and/or 150.
2. Congress made a deliberate choice to set performance measures for some programs and not set performance measures for other programs.
3. FHWA does not have the authority either to alter appropriations or to direct States to spend those funds differently than Congress appropriated.
4. FHWA cannot enact major policy changes without demonstrating “clear congressional authorization”.
5. FHWA’s methodology is flawed, and estimated compliance costs are far higher than what is predicted in the notice.
6. In accordance with 5 U.S.C. § 553, any proposed effective date must be at least 30 days after publication of any rule.

“The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma.”

Additionally, ODOT offers the following objections:

1. The mission and purpose of the Oklahoma Department of Transportation does not include reducing GHG gasses. ODOT has neither the legislative authority nor the ability to do so effectively.

ODOT is a statutorily created by the Oklahoma Legislature to act as custodian to the State Highway System, whose duty is to plan, develop, operate, maintain and protect highway facilities of the state for present and future use. “Inadequate roads and streets obstruct the free flow of traffic; result in undue cost of motor vehicle operation; endanger the health and safety of the citizens of the state; depreciate property values; and impede generally economic and social progress of the state” (69 OS §101(c)). An integrated system of roads and highways is essential to the general welfare of the State of Oklahoma. A portion of the Oklahoma State Highway System is designated as part of the National Highway System (NHS), which is critical to our national economy. The NHS is only 3% of all public roads in Oklahoma, and represents 48% of the vehicle miles traveled. Oklahoma DOT has no control over the number of vehicles that use interstate or other national highway system routes, nor what fuel sources they use. States do not have the legal authority to reduce greenhouse gas emissions on NHS roads by regulating or restricting the flow of interstate traffic, which is the GHG metric at its core.

ODOT is committed to the statewide transportation planning requirements promulgated in Title 23 Part 450. That planning process provides for consideration and implementation of projects, strategies, and services that will address the following factors:

- (1) Support the economic vitality of the United States, the States, metropolitan areas, and nonmetropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
- (2) Increase the safety of the transportation system for motorized and non-motorized users;
- (3) Increase the security of the transportation system for motorized and non-motorized users;
- (4) Increase accessibility and mobility of people and freight;
- (5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
- (6) Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;
- (7) Promote efficient system management and operation;
- (8) Emphasize the preservation of the existing transportation system;
- (9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- (10) Enhance travel and tourism.

The balanced consideration of these competing priorities and goals identified in the federal planning factors is a difficult and complex task that the federal government has intentionally left in the hands of the States to administer. It is worth noting that as per 23 CFR 450.206(d), “The failure to consider any factor specified in paragraph (a) or (c)” (planning factors and performance measures...) of this section shall not be subject to review by any court under title 23 U.S.C., 49

“The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma.”

U.S.C. Chapter 53, subchapter II of title 5 U.S.C. Chapter 5, or title 5 U.S.C. Chapter 7 in any matter affecting a long-range statewide transportation plan, STIP, project or strategy, or the statewide transportation planning process findings.”

The result of the planning process is our 8 Year Construction Work Program, which contains Oklahoma’s STIP. The 8 Year Plan contains more than \$8.4 Billion in needed transportation improvements, comprised of all the estimated funding available, identified and committed through 2030. Even with that committed investment level, an additional \$22.7 Billion is estimated as required to bring all State Highway System (SHS) pavements to good condition, eliminate safety concerns, and eliminate all structurally deficient and functionally obsolete bridges on the SHS. This is to simply meet the stewardship requirements of our existing system, absent new programs and performance requirements.

2. As also identified by AASHTO, these new target setting requirements are contrary to federal law and represent a major departure from current practice in that, under the proposal, FHWA would be involved in setting targets by establishing that CO₂ must decrease. However, the statute specifies that the State sets targets. In fact, this NPRM is contrary to FHWA’s own guidance on performance management and target setting which states that:

“The FHWA strongly discourages the use of aspirational targets. In 23 CFR 490.101, a target is defined as a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by FHWA. Setting aspirational targets that are not data-driven, realistic, or achievable does not align with the performance management framework or the stated congressional policy to improve project decision-making through performance-based planning and programming...”

3. Achieving CO₂ reductions of the magnitude envisioned cannot fall on the State DOT’s and be effective. Transportation GHG reduction opportunities fall into several categories, like adoption of zero emission vehicles, reducing the carbon intensity of fuels, and making vehicles more fuel efficient, all of which have previously and historically dictated by the federal government. ODOT supports the legislatively authorized NEVI program and believes that while creation of EV infrastructure through this program will assist in the adoption of EVs by our citizens, a more effective policy tool to increase and accelerate adoption of EVs could include meaningful significant monetary incentives to replace gasoline combustion engines, rather than an exercise in meaningless goal setting and reporting burden on the State DOTs.

Another category includes reducing the growth in future on-road travel activity through land use planning, for which ODOT has no authority or responsibility to direct, along with the shift from single occupant vehicles and other measures that reduce on-road travel demand. ODOT administers the FTA’s rural transit funding, and administers the state investment in transit for all systems. The Federal Transit funding mechanisms are structurally and deeply flawed and cannot in their current form result in substantial GHG reduction. Even with increases in Federal Transit funding provided in IIJA for capital and operating costs, the 50% operating local match requirement precludes affordable system expansion and operation due in part to Oklahoma’s centralized tax system. Local governments have less ability to set revenue to meet match requirements of increased federal funding. The growth in access and frequency of service necessary to provide meaningful mobility choices to citizens in rural states like Oklahoma cannot be achieved unless federal support of transit is at or near 100% of operating costs.

“The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma.”

Departments of Transportation can and do support reduction of GHG emissions through the existing transportation priorities and goals of improving system efficiency, like adopting Transportation Systems Management and Operations with technology improvements and operational infrastructure improvements. Additionally, national standards, rules and assistance for reducing emissions from material production, construction, and maintenance of the transportation system through lower-carbon materials and processes or more durable applications would be helpful and meaningful, unlike the GHG Performance Measure Target setting as proposed.

ODOT is in agreement with the many issues identified in AASHTO comments also provided to the docket, specifically that FHWA has grossly and significantly underestimated the costs it will take to implement this major rulemaking in terms of time and resources of staff and data collection, the costs which would be associated with the effects of implementing the efforts and programs that would be required to meet the GHG targets in the rule, coupled with the costs of not implementing other planned and needed transportation investments, and ultimately the costs to the Transportation Program funding itself, eliminating the very revenue stream on which transportation investment relies, with no feasible plan for the future replacement in sight - all combined, the costs are incalculable.

It is evident in the NPRM that through HPMS reporting and the FUELS/FASH data the FHWA has the ability to estimate GHG emissions directly without the pretense of performance goals and reporting burden placed on the State DOT's. There may be value in the quantification of GHG levels attributable to the NHS, and comparing to baseline and future scenarios to policymakers looking to effect meaningful change that could be authorized in future legislation.

ODOT appreciates the opportunity to raise these concerns. If you would like additional information or would like to discuss these concerns raised, please contact ODOT Deputy Director Dawn Sullivan, P.E., at dsullivan@odot.org.

Sincerely,



Tim J. Gatz
Oklahoma Secretary of Transportation



July 20, 2022

Deputy Administrator Stephanie Pollack
 Federal Highway Administration
 Docket Management Facility
 United States Department of Transportation
 1200 New Jersey Avenue SE
 Washington, DC 20590

Re: Docket FHWA-2021-0004

Dear Deputy Administrator Pollack:

The South Carolina Department of Transportation (SCDOT) appreciates the opportunity provided by the Federal Highway Administration (FHWA) to comment on Docket FHWA-2021-0004 – Notice of Proposed Rule Making on the National Performance Management Measures: Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure. South Carolina stands ready to implement the promise of the Infrastructure Investment and Jobs Act (IIJA) with its federal partners, consistent with the 100+ year policy framework of federally-supported, state-owned highways. SCDOT has several comments on the Notice of Proposed Rule Making (NPRM) issued by FHWA pertaining to the Greenhouse Gas (GHGs) Measure.

SCDOT is concerned that the NPRM exceeds the legislative intent provided by Congress and respectfully requests that FHWA reconsider its proposal. This is not to debate major policy questions like GHGs or what methods should be used to address them. Rather, SCDOT's concerns are based on questions of statutory language and intent; agency jurisdiction; and potential delays in building 21st century transportation infrastructure that could result.

The IIJA is an expansive piece of legislation that reauthorized surface transportation activities for five additional years. It establishes new programs for surface transportation; greatly expands funding both through formula funding and discretionary grants; and expedites environmental review processes. The plain language in the IIJA, however, does not provide FHWA clear authority to regulate states for the GHGs coming from their transportation sectors.

SCDOT has the following concerns with the proposed rule as written:

Policy Case is based on Executive Action without Congressional Authorization: The NPRM lays out a justification for the proposed rulemaking action citing E.O 13990 and E.O. 14008 as the foundation. Both Executive Orders are expansive with required reports and interagency working groups being established to advance matters of Administration priority. These actions are within the scope of the Executive Branch, but do not provide authority for FHWA to require the states to address major policy questions like implementing specific GHG reductions.

Legal Justification for the NPRM is Not Enumerated in Statute: The NPRM asserts that legal authority is found in 23 U.S.C. 150(c). That is – at best – a tortured interpretation of relatively clear language on what items Congress intended to measure. The national goals in 23 U.S.C 150(b) define a focus on reduction of traffic fatalities, reducing congestion, improving the National Highway Freight Network, etc.

This statutory language was added as part of MAP-21 and the FAST Act authorization laws to create performance measures on the condition and performance of highways. These national goals are being used by FHWA as justification for authorizing its mandate that state departments of transportation adhere to a reduction in GHG by 50-52% in 2030 and net zero in 2050. MAP-21 (2012) established the national performance goals in 23 U.S.C. 150(b) for federal highway programs. Among the national goals is Environmental Sustainability which is statutorily-defined “to enhance the performance of the transportation system while protecting and enhancing the natural environment.”

Neither MAP-21 nor the FAST Act nor the IIJA mandates GHG reduction in their plain language as proposed by FHWA in the NPRM. To claim this provides regulatory authority for the proposed rule requires assertions simply not supported in the statutory language. Moreover, a more reasonable interpretation is Congress intended to emphasize the existing FHWA and state responsibilities like those in the Congressionally-established National Environmental Protection Act (NEPA) that were in place when 23 U.S.C 150(b)(6) was adopted.

23 U.S.C. 150 (c)(2) clearly limits the performance measures to those described in the statute. Looking at the plain language of 23 U.S.C 150 (c), there is no reference to GHGs. In 23 U.S.C. 150 (c)(3), the law provides for proscribed categories of measures such as pavement condition and bridge condition statistics. The language is plain and the intent is clear. South Carolina has embraced performance management and has a robust Transportation Asset Management Plan to drive investment in its transportation system – particularly in pavement quality, bridge condition, freight movement, and safety; consistent with and oftentimes going above the requirements 23 U.S.C 150 (c)(3).

True Costs Are Hidden: Major policy questions like reducing GHGs – particularly those tying multi-billion funding commitments to the states – should be rooted in clear Congressional action. The proposed rule indicates that the cost is between \$11 million to \$12.9 million nationally. This likely understates the true cost of the proposed rule. Under 23 C.F.R. 1.36, FHWA retains the right to withhold funds to states that do not comply with the regulations established by FHWA:

If the Administrator determines that a State has violated or failed to comply with the Federal laws or the regulations in this part with respect to a project, he may withhold payment to the State of Federal funds on account of such project, withhold approval of further projects in the State, and take such other action that



he deems appropriate under the circumstances, until compliance or remedial action has been accomplished by the State to the satisfaction of the Administrator.

While the rule asserts that states will not be penalized for not meeting targets, given this broad grant of authority, there is no assurance that the power vested in the FHWA Administrator would not be enforced to require compliance with the targets being established under the NPRM. There has been no calculation published in the NPRM on the cost of achieving the targets. Conceivably, the costs may be so significant that it will likely impair a state's ability to achieve progress on the other national goals enumerated in 23 U.S.C. 150 – even with the increased funding authorized in the IIJA. It is doubtful that was the Congressional intent behind the IIJA. Courts have long required Congress to speak clearly when providing agency authorization if it has impact to costs and national applicability

Creates Administrative Confusion: Finally, this action creates unnecessary administrative confusion. Within the federal environmental regulatory framework, agencies have well-established authorities. The Waters of the United States are permitted by the US Army Corps of Engineers. Endangered species are under the purview of the US Fish and Wildlife Service. This rule creates confusion on which agency the appropriate regulator of air quality is. Is it the Environmental Protection Agency acting under the Clean Air Act or the FHWA working under a labored interpretation of an unrelated statute?

SCDOT is committed to making the IIJA a success. That means maintaining the state-federal partnership that has served the United States well for 100+ years and abiding by the plain language of the statute intended by Congress. SCDOT strongly encourages FHWA to reconsider this proposed rule. To threaten funding allocated to the states for a regulation that is unsupported by statute is contrary to the spirit of the IIJA and may necessitate judicial action to assure that FHWA is adhering to its statutorily-prescribed role.

SCDOT recommends that the FHWA avoid such delays involving regulatory ambiguity and instead continue to partner with the states in moving forward with building modern transportation for all Americans.

Sincerely,



Christy A. Hall, PE
Secretary of Transportation

EC: Governor Henry D. McMaster
Members of the South Carolina Congressional Delegation
SCDOT Commission





STATE OF UTAH

SPENCER J. COX
GOVERNOR

OFFICE OF THE GOVERNOR
SALT LAKE CITY, UTAH
84114-2220

DEIDRE M. HENDERSON
LIEUTENANT GOVERNOR

August 25, 2022

The Honorable Pete Buttigieg
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue SE
Washington, D.C. 20590

Dear Secretary Buttigieg:

SUBJECT: Greenhouse Gas Emissions Measure Proposed Rule

Thank you for your recent visit to Utah and for the visit to the Western Governors Association meeting just prior to that. I know as governors we all appreciated the chance to engage with you, particularly given your Department's role in working with states to allocate IIJA funding and implement the many programs under the law. And of course I appreciated your launch of the PROTECT Grant program while in Utah.

In our meeting I mentioned my concerns with USDOT's recently proposed rule on greenhouse gas emissions. I appreciated your comments, but I'm still concerned that the rule goes beyond Congress's delegation of authority to the Department and will have a negative impact on states like Utah.

The proposed targets and related performance calculation metrics contained in the proposed rule place an unequal burden on rural states and states with growing populations, both of which are characteristic of Utah.

Utah is one of the fastest-growing states in the Nation (Utah's population is projected to grow 14% by 2030 and 66% in the next 40 years). The calculation proposed by FHWA ignores the function of population and adopts a formula which would obscure many of the emissions improvements made in states with high population growth.

Utah is also a rural state with approximately 10% of its population living in rural areas. Rural residents need to drive further to access essential goods and services and on average drive 10 miles more per day than urban residents. Reduction of distances driven to goods and services in rural areas or the broad availability of other modes to access these goods and services would likely be associated with increases in population. Additionally, a portion of fuel sales are consumed outside of the roadway network, a circumstance that is likely more prevalent in rural areas. Performance calculations for on-road carbon dioxide emissions should give consideration to the needs of rural residents and whether fuel is actually used for an on-road purpose.

We also recommend that any carbon reduction program or performance measure(s) should not be tied to funding as a means to either incentivize (carrot) or disincentivize (stick) certain actions.

I encourage you to withdraw the proposed rule, but in the absence of that, I encourage you to modify the proposal to mitigate the impact on states with fast-growing populations and the distinct driving habits of rural areas.

Respectfully,



Spencer J. Cox
Governor



DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.
Executive Director

TERIANNE S. NEWELL, P.E.
Deputy Director of Planning and Investment

LISA J. WILSON, P.E.
Deputy Director of Engineering and Operations

State of Utah

SPENCER J. COX
Governor

DEIDRE M. HENDERSON
Lieutenant Governor

October 13, 2022

The Honorable Stephanie Pollack
Deputy Administrator
Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Deputy Administrator Pollack:

SUBJECT: National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure (Docket No. FHWA-2021-0004)

The Utah Department of Transportation (UDOT) appreciates the opportunity to provide its comments on the Federal Highway Administrations (FHWA) Notice of Proposed Rulemaking for “National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure”. UDOT acknowledges that GHG emissions are a global and national concern and recognizes the role of transportation in the generation of these emissions. UDOT’s transportation planning process follows a quality of life framework, many of the goals of which, connected and healthy communities, modal options that improve mobility, and good health for individuals and communities, are consistent with the national goal of environmental sustainability and reduced GHG emissions. While UDOT supports the fundamental goal of reducing GHG emissions, there are several components of the proposed measure that are concerning.

First, UDOT believes the requirement for all state DOTs to set targets that align with a 50% reduction of GHG by 2030 (from 2005 levels) and net-zero emissions by 2050 is problematic because these targets are not broadly attainable and ignore the unique setting of each state.

As a state DOT, UDOT has very limited authority to implement changes that result in lowering of GHG. The primary tool available to UDOT is creation of infrastructure to support shifts to modes that generate lower amounts of GHG. As discussed above, providing mobility options is a key aspect of UDOT’s vision, however, these improvements would not result in a 50% reduction of GHG in less than eight years.

Deputy Secretary Pollack
Page 2
October 13, 2022

UDOT feels it is counterproductive to set aspirational targets that cannot be achieved; we encourage FHWA to reconsider this aspect of the proposed rule. Regarding the 2050 net-zero target, UDOT remains concerned with the achievability of this target, but feels reductions in GHG would likely accelerate closer to 2050 as improved modal options, connections and technology become more widely integrated into the transportation network and larger scale shifts occur.

The proposed targets and related performance calculation metrics also place an unequal burden on rural states and states with growing populations, both of which are characteristic of Utah. Utah is one of the fastest growing states in the Nation (Utah's population is projected to grow 14% by 2030 and 66% in the next 40 years). Unfortunately, the calculation proposed by FHWA ignores the function of population and adopts a formula which would obscure many of the emissions improvements made in states with high population growth. While Utah is a growth state, it is also a rural state. Approximately 10% of Utah's population lives in rural areas. Rural residents need to drive further to access essential goods and services and on average drive 10 miles more per day than urban residents. Reduction of distances driven to goods and services in rural areas or the broad availability of other modes to access these would likely correspond with increases in population. UDOT notes that a portion of fuel sales are consumed entirely outside the roadway network, a circumstance that is likely more prevalent in rural areas and does not appear to be accounted for in the calculation.

UDOT also questions FHWA's estimate of the cost of implementing this measure, identified in the proposed rule as \$11 million dollars over 10 years, when discounted at 7%. UDOT feels this cost does not adequately account for the time and level of expertise needed to establish targets, conduct biennial reporting, and for coordination between DOTs and MPOS on establishing targets to "the maximum extent practicable" as proposed in the rule, as well as coordination with other state agencies as will also be necessary. Correspondingly, it would create unnecessary burdens and decrease productivity to add requirements for setting targets outside the 4-year target framework already established and utilized. To minimize the effort associated with requirements regarding GHG performance measures, UDOT recommends they be dovetailed with the 4-year target setting requirements that are already in place for other transportation performance measures.

In addition, UDOT objects to the use of 2021 as the reference year and recommends FHWA instead use 2019 or 2022. This would help ensure that the baseline year represents normalized VMT that is not unduly influenced by the coronavirus pandemic or by varying policies across the states regarding lock-down requirements.

Deputy Secretary Pollack
Page 3
October 13, 2022

UDOT also disagrees with the statement in the proposed rule that "...States should have adequate time to establish targets for the proposed GHG measure before targets are reported in the State Biennial Performance Report due to FHWA by October 1, 2022." and notes that this date is prior to the completion of the comment period on the proposed rule. The input and coordination between UDOT, multiple MPOs and staff from other state agencies, as would be necessary to develop and finalize any target, is substantial and not achievable by the now passed date.

Finally, UDOT is concerned with the justification used by FHWA to establish legal authority to implement the GHG emissions performance measure. The statutory authority for performance management requirements is derived from 23 USC 150(c) which states that USDOT shall "limit performance measures only to those described in this subsection." The measures in this subsection do not include GHGs. UDOT is very concerned that the legal authority provided by FHWA to establish a GHG emissions performance measure could become precedent for future performance measures to be assigned to the National Highway System without clear authorization from Congress.

Thank you again for the opportunity to comment. UDOT appreciates FHWA's consideration of its input on the NPRM for National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure.

Sincerely,



Carlos M. Braceras, P.E.
Executive Director

CMB/NK/dej

Cc: Teri Newell, UDOT
Ben Huot, UDOT
Naomi Kisen, UDOT



**WEST VIRGINIA
DEPARTMENT OF TRANSPORTATION**

1900 Kanawha Boulevard East • Building Five • Room 109
Charleston, West Virginia 25305-0440 • (304) 558-0444

Jimmy Wriston, P.E.
Secretary of Transportation
Commissioner of Highways

September 13, 2022

Federal Highway Administration
Docket Management Facility
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

(Submitted via Federal eRulemaking Portal: <http://www.regulations.gov>)

Re: Docket No. FHWA-2021-0004
National Performance Management Measures; Assessing Performance of National Highway System, Greenhouse Gas Emissions Measure
Notice of Proposed Rulemaking (NPRM)

The West Virginia Department of Transportation (WVDOT) appreciates the opportunity provided by the Federal Highway Administration (FHWA) and U.S. Department of Transportation (DOT) to comment on Docket No. FHWA-2021-0004, Notice of Proposed Rulemaking (NPRM) regarding National Performance Management; Assessing Performance of National Highway System, Greenhouse Gas Emissions Measure.

FHWA proposes to require State DOTs and metropolitan planning organizations (MPOs) to establish declining carbon dioxide (CO₂) targets and to establish a method for the measurement and reporting of greenhouse gas (GHG) emissions associated with transportation under the Highways title of the United States Code (U.S.C.). These proposed GHG measures would be codified among the National Highway Performance Program (NHPP) performance measures that FHWA established in 23 CFR part 490 through prior rulemakings. This policy calls for GHG emission reductions of 50 to 52 percent below 2005 level by 2030 and for the United States (U.S.) to achieve net-zero emissions by 2050 based on reference year 2021.¹

West Virginia acknowledges virtually all sectors of the economy – transportation, industry, agriculture, power production, commerce, etc. – emit GHGs. GHGs have global effects, no matter where they are emitted. Reducing GHGs will require all sectors of the economy to participate. However, West Virginia does not feel the NPRM will allow the State DOT to take a positive approach toward climate change and permit our State to focus on the measures State DOTs can control.

¹ 87 FR 42415, July 15, 2022, National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure.

Environmental Protection Agency (EPA) or FHWA - Who Has the Responsibility or Authority to Enforce GHG Rules?

The Clean Air Act (CAA), 42 U.S.C. §7401 et seq. (1970), is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Signed into law by Richard Nixon in 1970, the CAA is America's most important and successful air pollution control law. Among other things, this law authorizes EPA to establish National Ambient Air Quality Standards (NAAQS) to protect the public's health and welfare and to regulate emissions of hazardous air pollutants.² Due to the CAA, America's air quality is better today than in 1970, despite major growth in our economy and industrial production.³

NAAQS are the nation's pollution caps EPA is required to set on the total amount permissible in the air for certain "criteria pollutants". EPA has thus far capped the level of allowable ozone (O_3), particulate matter (PM), carbon monoxide (CO), nitrogen oxides (N_2O), sulfur dioxide (SO_2), and lead (Pb). The NAAQS are established by federal scientists using the best available scientific information to determine the effects of different levels of pollution on human health and welfare. Once the safe level has been scientifically established, each of the 50 states develops strategies to attain the prescribed pollution caps.

The CAA's national pollution cap program is our only current mechanism to establish a science-based national standard for the safe level of GHGs in the atmosphere. The critical role of such a program cannot be replaced by new legislation, but instead will complement new pollution reduction tools passed by Congress.⁴

The EPA has taken steps toward curbing GHG pollution under the CAA. EPA issued a formal finding that GHG pollution endangers public health and welfare and moved to limit emissions from passenger cars and trucks. EPA also acknowledged that major new or modified stationary sources of GHG pollution, like power plants and factories, must get permits and control their emissions before construction.⁵

The CAA mandates controls on air pollution from mobile sources by regulating both the composition of fuels and emission-control components on motor vehicles and nonroad engines. Vehicle fuel standards for gasoline and diesel are met by refiners/importers, and other parties in the fuel distribution system. Under the 1990 CAA amendments, EPA is moving, in stages, toward more stringent vehicle standards.⁶ EPA and DOT issued a joint rule-making that set GHG emissions and fuel economy standards for the largest sources of GHGs from transportation, including cars, light- and heavy-duty trucks.⁷ Some of the actions taken include:

²Environmental Protection Agency (EPA), <https://www.epa.gov/laws-regulations/summary-clean-air-act>, last updated September 28, 2021.

³Center for Biological Diversity, Climate Law Institute, "Frequently Asked Questions: Setting a National Pollution Cap on Greenhouse Gases Under the Clean Air Act", https://www.biologicaldiversity.org/programs/climate_law_institute/global_warming_litigation/clean_air_act/pdfs/Clean-Air-Act-FAQ.pdf.

⁴ Environmental Protection Agency (EPA), <https://www.epa.gov/laws-regulations/summary-clean-air-act>, last updated September 28, 2021.

⁵ Center for Biological Diversity, "The Clean Air Act and the Climate", https://www.biologicaldiversity.org/programs/climate_law_institute/global_warming_litigation/clean_air_act/index.htm.

⁶ Environmental Protection Agency (EPA), <https://www.epa.gov/regulatory-information-topic/regulatory-and-guidance-information-topic-air>, last updated June 21, 2022.

⁷ Environmental Protection Agency (EPA), <https://www.epa.gov/transportation-air-pollution-and-climate-change/carbon-pollution-transportation>, last updated May 19, 2022.

- EPA finalized GHG emissions standards for passenger cars and light trucks for model years 2023-2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and are based on sound science and grounded in a rigorous assessment of current and future technologies. This new rule became effective on January 28, 2022.⁸
- Phase 1 GHG Rule for model years 2014-2018: In September 2011, in response to a Presidential Memorandum issued in May 2010, EPA in coordination with National Highway Safety Traffic Administration (NHTSA) issued GHG emissions and fuel economy standards for medium- and heavy-duty trucks manufactured in model years 2014-2018.
- Phase 2 GHG Rule for model years 2019-2027: In October 2016, EPA and NHTSA jointly finalized Phase 2 standards for medium- and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution to reduce the impacts of climate change, while bolstering energy security and spurring manufacturing innovation.
- On August 5, 2021, EPA announced plans to reduce GHG emissions and other harmful air pollutants from heavy-duty trucks through a series of rulemakings over the next three (3) years.
 - The first rulemaking of this Clean Trucks Plan, set out in a proposal published on March 28, 2022, focuses on reducing criteria pollutant emissions and would apply to heavy-duty vehicles beginning in 2027.
 - EPA is also developing two (2) other commercial vehicle actions following President Biden's Executive Order.
 - The first will focus on light- and medium-duty vehicles (i.e. commercial pickup trucks and vans) and will address multi-pollutant emissions, including GHG emissions, for model year 2027 and later.
 - The second will focus on GHG emissions for model year 2030 and later for heavy-duty engines and vehicles.⁹

EPA's successful car and truck standards will lead to significant GHG emissions reductions. West Virginia must agree with Nick Goldstein, vice president of regulatory and legal issues at the American Road and Transportation Builders Association, who said, "Here, the Department of Transportation is swinging into the EPA space...And I think what *West Virginia v. EPA* tried to do is say that agencies need to stay in their lane as established by Congress. And I think our initial concern with this rule is that it's outside the FHWA's lane."¹⁰

In *West Virginia v. EPA*, the majority of the U.S. Supreme Court fenced the EPA's ability to regulate carbon emissions in the power sector. In the 6-3 decision, the court ruled that the Clean Power Plan went beyond the EPA's regulatory mandate. Specifically, the EPA had exceeded congressional authority by pushing utilities to make system-wide moves away from coal power generation and toward cleaner forms of electricity production, such as wind and solar energy. The majority opinion recognized EPA authority to regulate CO₂ emissions from the utility sector. However, it placed restrictions on how far that authority

⁸ 86 FR 74434, December 20, 2021, Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards.

⁹ Environmental Protection Agency (EPA), <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks>, last updated July 21, 2022.

¹⁰ "DOT Rule Would Require States to Curb Highway Carbon Emissions", July 7, 2022,

<https://www.capito.senate.gov/news/in-the-news/dot-rule-would-require-states-to-curb-highway-carbon-emissions->

reaches. The decision affects all federal agencies, many of which contribute to climate policy by trying to reduce emissions or build resilience.

The EPA is permitted to take steps to function within its bounds. The decision endows Congress with a more essential role to play in defining the regulatory reach of U.S. climate efforts. With federal agencies lacking broad regulatory authority in matters of economic and political significance, the legislative branch will hold the reins to enacting system-wide legislation or explicitly imbuing agencies with regulatory authority. Similarly, the decision endows courts with an added tool to police agency regulations.¹¹

Reference Year 2021

As proposed in the NPRM, the reference year, defined as calendar year 2021, would be used in calculating the GHG measure. FHWA proposes to use calendar year 2021 for the reference year for the GHG measure because it is the most recent year for which data will be complete and available.¹²

From year to year, emissions can rise and fall due to changes in the economy, the price of fuel, and other factors. Since 1990, gross U.S. GHGs have decreased by 7 percent. In 2020, U.S. GHG emissions decreased 11 percent compared to 2019 levels. The sharp decline in emissions was primarily from CO₂ emissions from fossil fuel combustion and was largely due to the coronavirus (COVID-19) pandemic-related reductions in travel and economic activity, including a 13 percent decrease in transportation emissions driven by less travel due to the COVID-19 pandemic. During this period, GHG emissions from passenger transportation decreased by 16 percent, while GHG emissions from domestic freight transportation saw a 6 percent decrease.¹³ Therefore, West Virginia respectfully disagrees with the use of calendar year 2021 as the reference year. The fuel consumption and vehicle miles travelled (VMT) in the U.S. will be skewed due to the orders and operational changes implemented by local, state, federal, and private sectors due to the pandemic, including calendar 2020 and any year thereafter.

GHG Emission Targets – Due by October 1, 2022

WVDOT disagrees that States would have adequate time to establish targets for the proposed GHG measure before targets are reported in the State Biennial Performance Report, due to FHWA by October 1, 2022. As indicated in the NPRM, this date would allow for this new measure to be in place at the start of the Transportation Performance Management's (TPM's) 4-year reporting period.¹⁴ Before entertaining the establishment of declining targets, this proposed NPRM should be properly vetted with the public and their comments taken into consideration before, or even if a rule, is to be finalized. After a rule is finalized, then State DOTs should begin this effort.

¹¹ Hill, Alice C. and Madeline Babin, "The Supreme Court's EPA Ruling Will Delay U.S. Climate Action", July 6, 2022, https://www.cfr.org/in-brief/supreme-court-epa-west-virginia-ruling-delay-us-climate-change-action?gclid=Cj0KCQjwpeAYBhDXARIzAEzItbEb2NJ0oFKSEOS50iZ18vbnrTQsWEznQGEpapom3kAvg-t9_R4wnbJaAkrEEALw_wcB.

¹² 87 FR 42415, July 15, 2022, National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure.

¹³ Environmental Protection Agency (EPA), last updated August 5, 2022, <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

¹⁴ 87 FR 42412, July 15, 2022. National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure.

Separate State and MPO targets

A MPO is a federally mandated and funded transportation policy-making organization, for metropolitan areas with a population greater than 50,000. MPOs are made up of representatives from local government and governmental transportation authorities. MPOs were introduced by the FHWA Act of 1962, to ensure regional cooperation in transportation planning.¹⁵ State DOTs distribute federal planning funds to MPOs for their operation.

How can MPOs be held accountable for setting and meeting declining CO₂ emissions in their respective area when the organization is only tasked with planning and need to rely on the State DOT to include their proposed improvements in the State's fiscally constrained annual plan?

How does FHWA intend for MPOs to have declining CO₂ targets when the MPO encompasses multiple states? Of the eight (8) MPOs in West Virginia, five (5) are multi-state MPOs.

Limitation of Rule to VMT on National Highway System (NHS)

West Virginia is centrally located, surrounded by five (5) states (Ohio, Kentucky, Virginia, Maryland, and Pennsylvania), and within 500-miles of 60 percent of the U.S. population. Consumers have a choice on which modes and means that they choose to travel from one point to another. State DOTs are not in a position where they can dictate the transportation option, for out of state residences, as well as for our own State's citizens.

This rule would only apply to the Interstate and non-Interstate NHS. Since 23 U.S.C. 150(c)(3)(IV)-(V) refers only to the performance of the Interstate system and the non-Interstate NHS, FHWA only has authority to apply this measure to the Interstate system and the non-Interstate NHS.¹⁶

GHG emissions from users of the system make up the vast majority (about 94 percent) of transportation-related emissions. While the DOT has only a modest amount of ability to affect and control these emissions, strategies to reduce the large volume of emissions from the transportation sector are most effectively introduced in strategic and long-range planning and carried out through project decisions, programming, and other implementation activities.¹⁷ State air quality or energy agencies often lead statewide GHG reduction efforts, not State DOTs.¹⁸ FHWA should leave heading up this measure to the EPA, who has nationwide authority.

Definition of GHG

There appears to be a conflict in the NPRM regarding the use of the term GHGs. In the NPRM, the FHWA proposes to establish declining CO₂ targets and to establish a method for measurement and reporting of GHG [CO₂] emissions.¹⁹ FHWA also proposes to define the term GHG as "any gas that absorbs infrared radiation (traps heat) in the atmosphere. The proposed definition further notes that 97 percent of on-road GHG emissions are CO₂ from burning fossil fuels, and that other transportation GHGs are methane (CH₄), nitrous oxide (N₂O), and

¹⁵ National Association of Regional Councils (NARC), [https://narc.org/about/what-is-a-co-g-or-mpo/](https://narc.org/about/what-is-a-cog-or-mpo/).

¹⁶ 87 FR 42407, July 15, 2022, National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure.

¹⁷ TRB's Cooperative Research Programs, March 8, 2022, "Reducing Greenhouse Gas Emissions: A Guide for State DOTs", Chapter 10, Page 2.

¹⁸ TRB's Cooperative Research Programs, March 8, 2022, "Reducing Greenhouse Gas Emissions: A Guide for State DOTs", Chapter 6, Page 8.

¹⁹ 87 FR 42401, July 15, 2022, National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure.

hydrofluorocarbons (HFCs).²⁰ Does this definition now subject States to having to reduce emissions for the other identified transportation GHGs?

Electric Vehicles (EV)

Achieving CO₂ reductions, as proposed in the NPRM, will depend on actions such as increasing the adoption of zero emission vehicles, improving system efficiency, and reducing the growth in future on-road travel activity through the shift from single occupant vehicles and other measures that reduce on-road travel demand.²¹

EVs have no tailpipe emissions; however, emissions are created during both the production and distribution of the electricity used to charge the vehicle. The introduction of EVs creates complications, since electricity emissions (including those generated by EVs) are typically reflected in non-transportation sectors. This can lead to a situation where the transportation portion of the GHG inventory does not reflect emissions from EVs, giving a false picture that EVs will produce zero transportation emissions in the future, when these emissions should be reflected in increased emissions from the electricity sector.²²

According to the International Energy Agency (IEA), an EV requires six (6) times the mineral inputs of a comparable internal combustion engine (ICE) vehicle. EV batteries are very heavy and are made with some exotic, expensive, toxic, and flammable materials. The primary metals in EV batteries include nickel, lithium, cobalt, copper and rare earth metals (neodymium and dysprosium). The mining of these materials, their use in manufacturing and their ultimate disposal all present significant environmental challenges. 90 percent of the ICE lead-acid batteries are recycled while only five (5) percent of the EV lithium-ion batteries are recycled.²³ There are downsides to moving solely toward zero-emission vehicles, including:

- EV batteries require rare metals. The batteries for EVs use a lot of lithium, the lightest metal and the lightest solid element under normal conditions. At this time there is not sufficient access to sources of lithium.
- Making EVs create more emissions. The actual manufacturing of an EV releases roughly the same amount of CO₂ as traditional ICE, but then you have to consider the production of the battery. Estimates suggest that 150 kilograms (kg) of CO₂ are released for every 1 kiloWatt hour (kWh) of battery capacity. For an EV to have a decent range (say 300 miles) between charges, it needs a battery that's at least 60 kWh in capacity. This means that a further 9 tons of CO₂ will be emitted during the making of an EV, giving a total of 16-19 tons of CO₂ emitted.
- EVs are only as green as their power sources. The environmental impact of an EV can increase or decrease considerably depending on how the electricity that charges its battery is made.

²⁰ 87 FR 42415, July 15, 2022, National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure.

²¹ 87 FR 42411, July 15, 2022, National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure.

²² TRB's Cooperative Research Programs, "Reducing Greenhouse Gas Emissions: A Guide for State DOTs", March 8, 2022, Chapter 2, Page 10.

²³ Heberling, Michael, The Environmental Downside of Electric Vehicles, April 7, 2022, [https://fee.org/articles/the-environmental-downside-of-electric-vehicles/amp?gclid=Cj0KCQjwpeaYBhDXARlsAEzltbEcZ85_bI3Czv4oyMLVfVY-tV7wPtAxP4IjbPbb46B2ZNwt9XmXQaAgWrEALw_wcB](https://fee.org/articles/the-environmental-downside-of-electric-vehicles/)

- EV have limited driving range. Although battery technology is improving, this remains a fact. The best EVs now have ranges of around 300 miles between charges, but many have a range of 100 miles or less between charges, which means they are much more suited for use in cities and on short, local journeys, rather than for long-distance travel. Using the heater or air conditioner in an EV, as well as towing, will also have an impact on an EVs driving range. Batteries also hold less charge when it's cold.
- Charging time. To charge EVs, while traveling, they need at least half an hour of charging at a dedicated, high voltage charging point, which may not be easily accessible at this time.²⁴
- EVs weigh more. Batteries are heavy. That's why EVs generally weigh considerably more than otherwise similar gasoline-powered vehicles. With the additional weight, EVs put more wear on the road, yet EV owners do not pay for that wear with any additional gas taxes.²⁵

State DOTs

On a Statewide level, State DOTs can lead the identification and implementation of strategies to reduce GHG emissions from the State's transportation sector through system management and operations, maintenance, and construction.

Reducing congestion through Transportation Systems Management and Operations (TSM&O) can reduce emissions without requiring travelers to change their behavior or purchase different types of vehicles. Traffic flow improvements that reduce emissions also typically benefit travelers in other ways – time, reliability saving, and possible safety benefits from reduced stop-and-go traffic. These strategies can be a ‘win-win’ for mobility, the economy, and the environment.²⁶

Maintenance activities contribute to GHG emissions directly from the trucks, equipment, facilities (buildings), and materials used to keep the system in a state of good repair. Maintenance (or lack thereof) can also influence GHG emissions indirectly through traffic delays associated with service interruption.²⁷

Construction is the largest source of emissions under a State DOT's direct control.²⁸ General GHG mitigation methods that could be included in final design and implemented during construction are:

- Equipment
 - Alternative fuels.
 - Energy-efficient equipment.
 - Operating procedures (i.e., idle reduction, minimize deadheading).

²⁴ Young People's Trust for the Environment, “ELECTRIC CARS A revolution in personal transport”, <https://ypte.org.uk/factsheets/electric-cars/what-are-the-downsides-to-electric-cars>.

²⁵ Cooley, Brian, January 28, 2022, “America’s new weight problem: Electric Cars”, <https://www.cnet.com/roadshow/news/americas-new-weight-problem-electric-cars/>.

²⁶ TRB's Cooperative Research Programs, March 8, 2022, “Reducing Greenhouse Gas Emissions: A Guide for State DOTs”, Chapter 16, Page 2.

²⁷ TRB's Cooperative Research Programs, March 8, 2022, “Reducing Greenhouse Gas Emissions: A Guide for State DOTs”, Chapter 15, Page 2.

²⁸ TRB's Cooperative Research Programs, March 8, 2022, “Reducing Greenhouse Gas Emissions: A Guide for State DOTs”, Chapter 14, Page 2.

- Materials
 - Use low-carbon virgin materials.
 - Use materials with recycled content.
 - Recycle or repurpose materials.
 - Reduce quantities used.
 - Source local materials.
- Traffic
 - Minimize detour lengths.
 - Minimize duration of delays and volume of traffic affected.
 - Staging area location (i.e., close to the construction site).²⁹

The implementation of GHG reductions in the final design and construction stage can also support other goals:

- Reductions in criteria pollutants and air toxics from construction materials transport, staging, site development, and traffic control.
- Reduction of fuel and energy consumption onsite and in production of materials.
- Reduction of environmental impacts at the materials production sites, including impacts to air quality.
- Reduction of the need for mining.
- Large-scale recycling and the use of non-virgin materials that are often by-products generated in older processes for coal and steam production but can be used as cement substitutes. These by-products are often stored in monofills that threaten ground and surface water when not entombed in concrete.
- Economic and job development for local and regional producers of materials.
- Local agency adoption of standardized specifications that extend the benefit of the DOT work to other public infrastructure agencies.³⁰

Other ways State DOTs can play a role in the State's GHG reduction effort include:

- Through its own planning and investment programs that direct the overall flow of resources to the State's transportation system.
- By providing data, guidance, and/or other resources to assist regional and local transportation planning and operating agencies in implementing GHG reduction strategies.
- By helping to shape State regulations and policies that affect transportation sector emissions.
- Leading by example – testing and introducing clean vehicles and fuels into its fleet, as well as testing and implementing low-carbon materials in construction and maintenance practices.
- By encouraging employees to participate in programs that reduce emissions associated with their commute, such as telecommuting, transit incentives, preferential parking for clean vehicles, etc.

²⁹ TRB's Cooperative Research Programs, March 8, 2022, "Reducing Greenhouse Gas Emissions: A Guide for State DOTs", Chapter I4, Page 7.

³⁰ TRB's Cooperative Research Programs, "Reducing Greenhouse Gas Emissions: A Guide for State DOTs", March 8, 2022, Chapter I4, Page 4-5.

- By acting on employee ideas/suggestions regarding methods that the DOT could undertake to reduce GHG emissions from its operations or the transportation sector as a whole.³¹
- By conducting research projects, either within a state or as a pooled funded activity to better establish best practices for construction, maintenance, and travel to reduce GHG emissions.

Summary

West Virginia's current emissions level are what other states are trying to meet. In October 2020, the entire State of West Virginia was designated as meeting all of the U.S. EPA's health-based NAAQS for the first time since 1978, when the initial nonattainment designations were made under the 1970 CAA. West Virginia is just the **16th state in the nation to be in attainment with all NAAQS**.³² Clearly what we are doing has worked, but there remain limited opportunities for us to further reduce GHG emissions.

According to the 2020 Census, West Virginia's population has decreased, hence potentially resulting in a reduction of VMT; reducing emissions.

Even without further policy actions at the State level, GHG emissions could be higher or lower than projected in 20 years due to factors such as:

- Different than expected rates of population, job, or income growth.
- Demographic and socioeconomic changes that lead to more or less travel (e.g., aging population, workforce participation rates, increased telecommuting).
- Consumer preferences for different forms of transportation and different living environments (e.g., urban versus rural).
- Changes in energy prices that might increase or decrease consumer demand.
- Policies at other levels of government (local, Federal) that affect transportation demand, vehicle efficiency, or the carbon intensity of travel, such as changes to Federal fuel efficiency and GHG standards.
- Other political or economic disruptions.³³

Rather than focusing solely on tailpipe emissions, other strategies for GHG reduction in transportation should be considered first:

- Reducing the carbon intensity of fuels.
- Making vehicles more fuel efficient.
- Improving the efficiency of transportation system operations.
- Reducing the amount of travel or shifting it to less carbon-intensive modes.
- Reducing emissions from material production, construction, and maintenance of the transportation system through lower-carbon materials and processes or more durable applications.

³¹ TRB's Cooperative Research Programs, "Reducing Greenhouse Gas Emissions: A Guide for State DOTs", March 8, 2022, Chapter 7, Page 2.

³² West Virginia Department of Environmental Protection (WVDEP), <https://dep.wv.gov/daq/planning/NAAQS/Pages/default.aspx#:~:text=West%20Virginia%20is%20just%20the,particulate%20matter%20and%20sulfur%20dioxide>.

³³ TRB's Cooperative Research Programs, "Reducing Greenhouse Gas Emissions: A Guide for State DOTs", March 8, 2022, Chapter 3, Pages 1-2.

- Offsetting carbon emissions.

Some identified strategies may not be feasible in rural areas. Any statewide strategies should be evaluated for their effectiveness and impacts in rural areas. For West Virginia and other rural states, as well as states with low population density, it may not be possible to significantly reduce GHG emissions attributable to transportation.

Products to enhance our lives comes not without ecological consequences. However, we believe it is in the U.S.'s best interest to protect consumers' choice.

Oil has been so demonized that we tend to overlook some of its positive traits as a power source relative to the battery power of EVs. The power for an ICE, oil, is a homogeneous commodity found abundantly around the world (*especially in our own backyard*). In contrast, the power for EVs is dependent on a mixture of diverse commodities from just a handful of third world countries.

In spite of the environmental hysteria about oil drilling, the surface area disturbed is relatively small since the oil is extracted from under the ground. In contrast, many of the materials prominent in the clean energy revolution are obtained through open-pit horizontal mining which is extremely damaging to the environment.

What is needed is an honest and comprehensive evaluation of the entire life cycle of clean energy from raw materials through disposition. There are pros and cons to all forms of energy. To date, all we have heard are the benefits of clean energy. It is now time to highlight the true costs of clean energy which must include the negative societal and environmental impact as well.³⁴

Again, WVDOT greatly appreciates the opportunity provided by the FHWA and DOT to comment on Docket No. FHWA-2021-0004, NPRM regarding National Performance Management; Assessing Performance of National Highway System, Greenhouse Gas Emissions Measure.

Sincerely,

Jimmy D. Wriston, P.E.
Secretary of Transportation/
Commissioner of Highways

³⁴Heberling, Michael, "The Environmental Downside of Electric Vehicles", April 7, 2022, <https://fee.org/articles/the-environmental-downside-of-electric-vehicles/> >gclid=Cj0KCQjwpeaYBhDXARIgAEzItbEcZ85_b13Czv4oyMLVtVY-t_V7wPtAxP4IjbPbb46B2ZNwt9XmXQaAgWtEALw_wcB

United States Senate
WASHINGTON, DC 20510

July 28, 2022

Stephanie Pollack, Deputy Administrator
Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Dear Deputy Administrator Pollack,

This letter is in response to the Federal Highway Administration's (FHWA) recently published Notice of Proposed Rulemaking *National Performance Management Measurements; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure* that would obligate state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) to measure transportation-related greenhouse gas emissions. The Administration suggests that states should use federal funding from the bipartisan *Infrastructure Investment and Jobs Act* (IIJA) to fulfill the obligations set forth in the NPRM; however, this proposed rule falls outside the scope and congressional intent of the bipartisan IIJA. Furthermore, the implementation of calculating and tracking greenhouse gases (GHG) emissions is overly burdensome on state DOTs and MPOs. For these reasons, we urge you to rescind this proposed rule.

This proposal comes on the heels of a December FHWA memorandum entitled *Policy on Using Bipartisan Infrastructure Law Resources to Build a Better America*, which drew backlash from lawmakers, state DOTs, and others for running afoul of congressional intent. We are equally concerned about this proposed rule, as it represents yet another example of FHWA using guidance and rulemaking to meet the Administration's climate agenda, under the guise of implementing the IIJA.

IIJA established new programs to incentivize and reward state DOTs and MPOs for implementing emissions reduction strategies in their planning and programming for surface projects. The climate-related programs were forged as a compromise to meet the Administration's priorities without mandating state DOTs and MPOs set and meet GHG performance targets. They were developed in a bipartisan manner in order to build common ground on contentious policies like GHG emissions targets.

Finally, the proposed rule requires state and local governments to develop and establish targets and report on progress to lower emissions. While some state environmental agencies track GHG emissions, they are not tracked and calculated by state DOTs. The proposed rule even admits this, stating that according to a 2018 survey, "relatively few State DOTs" are tracking CO₂ emissions and that "even fewer are using performance measures and quantitative approaches to do so." This rule's requirement is clearly outside the mission of state DOTs, which is to develop and maintain a safe and efficient transportation system. Therefore, we find it impractical that state DOTs will be able to easily measure GHG emissions by calculating fuel sales and vehicle miles travelled, as required in the rule. Furthermore, it is an implausible assumption that state DOTs, through planning and programming of transportation projects, will be able to lower the state's GHG emissions year over year in order to show improvement on air quality. As you know, transportation

planning and programming is a multistep, multiyear process. A state DOT's ability to select projects that will improve overall air quality year after year is impracticable and unlikely.

Imposition of these burdensome, and potentially unlawful, regulations also comes at a time when states are struggling to deal with the price and availability of construction materials and record inflation-economic headwinds we have not faced in decades. Your department's focus should be on helping to alleviate these burdens so we can take full advantage of the opportunity before us to fulfill the bipartisan vision of the IIJA and rebuild the nation's infrastructure.

In order to accomplish this goal, FHWA must implement IIJA, as enacted by Congress. Unfortunately, this proposed rulemaking violates both of these principles and we urge you to rescind the rule.

Sincerely,



Deb Fischer
United States Senator



Mike Crapo
United States Senator



James E Risch
United States Senator



Lindsay O. Graham
United States Senator



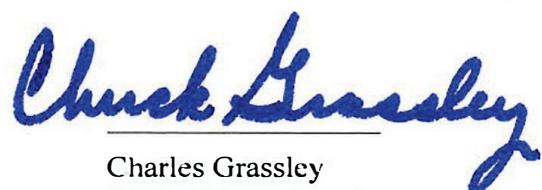
Robert Portman
United States Senator



Dan Sullivan
United States Senator



Roy Blunt
United States Senator



Charles Grassley
United States Senator



Roger F. Wicker
United States Senator

United States Senate

WASHINGTON, DC 20510

September 16, 2022

The Honorable Pete Buttigieg
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington DC 20590

Dear Secretary Buttigieg,

Thank you for the work the U.S. Department of Transportation (USDOT) is leading to address greenhouse gas (GHG) emissions from the transportation sector. The climate-related extreme weather disasters that we have witnessed just this summer, from deadly floods in Kentucky to triple digit heat that melted four miles of roadway in Texas, make it clearer than ever that the transportation sector must act now and take critical steps to combat climate change.

That is why we are writing to express our strong support for the Federal Highway Administration's (FHWA) rulemaking to establish a performance measure, target setting requirements, and reporting requirements for GHG emissions on the National Highway System (Docket No. FHWA-2021-0004). This regulation will create a much needed national framework for state departments of transportation to track the GHG emissions from their transportation systems and set targets to reduce those emissions.

Since 2012, when Congress established national goals for transportation, USDOT has implemented performance measures for states to track progress toward meeting those goals. One of those national goals is environmental sustainability, and the effects of climate change on environmental sustainability is undeniable. Climate change and environmental sustainability are not distinct issues, and it is abundantly clear that addressing the GHG emissions from the transportation sector is critical to achieving environmental sustainability. According to the Environmental Protection Agency, transportation accounts for more than a quarter of the nation's carbon pollution, and on-road mobile sources are the major source of those transportation emissions.

Using the existing authority provided by the Moving Ahead for Progress in the 21st Century Act (P.L. 112-141) in 2012, the Obama Administration previously proposed a set of performance measures, including a GHG measure, which was finalized in 2017. Despite the overwhelming evidence that the GHG emissions generated on our National Highway System have a major impact on environmental sustainability through climate change, the Trump Administration chose to reverse the GHG element of that regulation, claiming that the provisions would be costly to implement. Members of the House and Senate joined a letter at that time opposing the repeal of the GHG performance measure.

In their regulatory rollback, the Trump Administration predicated their decision to repeal the regulations on the basis that they were viewed as costly to implement. But as we have come to see, the short-term cost of implementation pales in comparison to the long-term costs of inaction and more severe climate-related emergencies. The washed out bridges and buckled roadways are clear testament to the fact that a failure to act will have severe costs today and in the years to come. These disasters also make clear the ways that the extreme weather related to climate change will greatly reduce the performance of our transportation system.

By establishing a framework for tracking greenhouse gas emissions from the transportation sector, this new rulemaking will also support the new programs recently developed in the bipartisan Infrastructure Investment and Jobs Act (IIJA), which provide funding to states to address resiliency to the effects climate change. Those programs include the PROTECT grants program, and to mitigate greenhouse gas emissions through the Carbon Reduction Program and the National Electric Vehicle Infrastructure program. A uniform tool for tracking emissions and setting targets for emissions reductions will particularly support the requirement that all States develop carbon reduction strategies. The rule is also consistent with changes made by Congress in section 11105 the IIJA to expand the scope and purpose of the National Highway Performance Program to include “activities to increase the resiliency of the National Highway System to mitigate the cost of damages from sea level rise, extreme weather events, flooding, wildfires, or other natural disasters.”

The goal of the performance management framework is to ensure States and Metropolitan Planning Organizations have access to accurate and consistent data on the performance of their assets and are able to make informed, data-driven decisions on investments that will improve that performance. Performance measures are a valuable tool to inform and improve state and local transportation decision making, which are more important than ever as we seek to make decisions today that will help to mitigate emissions so that we can avoid the worst impacts of climate change in the years to come.

In conclusion, we urge FHWA to proceed with a timely review and consideration of comments and promptly finalize the proposed rule, which we consider to be completely consistent with FHWA’s existing statutory authority and policy, as established by Congress in Section 150 of Title 23, U.S.C, to “provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision making through performance-based planning and programming.”

Thank you for your leadership on this important issue.

Sincerely,



Thomas R. Carper
United States Senator



Alex Padilla
United States Senator



Dianne Feinstein
United States Senator



Benjamin L. Cardin
United States Senator



Mazie K. Hirono
United States Senator



Brian Schatz
United States Senator



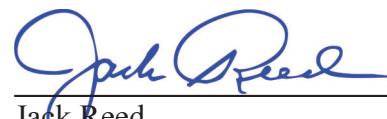
Robert P. Casey, Jr.
United States Senator



Elizabeth Warren
United States Senator



Bernard Sanders
United States Senator



Jack Reed
United States Senator



Sheldon Whitehouse
United States Senator



John Hickenlooper
United States Senator



Cory A. Booker
United States Senator



Richard Blumenthal
United States Senator



Chris Van Hollen
United States Senator



Richard J. Durbin
United States Senator



Martin Heinrich
United States Senator



Christopher A. Coons
United States Senator



Kirsten Gillibrand
United States Senator



Ron Wyden
United States Senator



Patty Murray
United States Senator



Sherrod Brown
United States Senator



Amy Klobuchar
United States Senator



Tina Smith
United States Senator



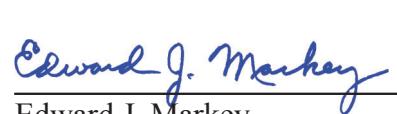
Michael F. Bennet
United States Senator



Robert Menendez
United States Senator



Jeffrey A. Merkley
United States Senator



Edward J. Markey
United States Senator

United States Senate
WASHINGTON, DC 20510

October 13, 2022

Ms. Stephanie Pollack
Deputy Administrator
Federal Highway Administration
Docket Management Facility
United States Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Re: Docket No. FHWA-2021-0004

Dear Deputy Administrator Pollack,

We write to express our opposition to the Federal Highway Administration's (FHWA) Notice of Proposed Rulemaking (NPRM) on a National Performance Management Measure; Assessing Performance of the National Highway System, Greenhouse Gas (GHG) Emissions Measure, Docket No. FHWA-20210004 (hereinafter "proposal"). FHWA's proposal exceeds the agency's limited statutory authority provided by Congress. We are especially troubled by this attempted overreach given the Supreme Court's recent ruling in *West Virginia v. US Environmental Protection Agency*, 142 S. Ct. 2587 (2022), which made clear that agency actions implicating major questions require clear congressional authorization. The signatories of this letter, which include members of the Senate Committee on Environment and Public Works with oversight authority of FHWA, respectfully request FHWA withdraw the proposal.

Current law does not provide any authority to make this proposal. A regulatory action such as this one is particularly suspect when an agency suddenly discovers in statute an authority that "allow[s] it to adopt a regulatory program that Congress had conspicuously and repeatedly declined to enact itself." *Id.* at 2610. Congress debated incorporating a greenhouse gas emissions performance measure and associated targets into title 23 of the United States Code (U.S.C.) during the development of the recent five-year surface transportation reauthorization legislation. The House passed legislation that would have provided FHWA with such authority. *See H.R. 3684 section 1403* (as engrossed in the House on July 1, 2021). The legislation that the Senate and House ultimately passed and President Biden signed into law in the Infrastructure Investment and Jobs Act (P.L. 117-58; IIJA) did not. Nowhere in the IIJA did Congress provide FHWA with any statutory authority to impose the performance measure or the requirement to set declining targets on state departments of transportation (DOTs) and metropolitan planning organizations (MPOs) contained in this proposal. FHWA cannot create of its own choosing the authority that Congress debated, considered, and rejected.

FHWA's attempt to create new authorities where Congress has not provided them would infringe on state DOTs' necessary flexibility to meet the surface transportation needs of their residents. FHWA's proposal is especially egregious because the agency seeks to "regulate a significant portion of the American economy" and potentially "require billions of dollars in spending" by

private persons or entities.” *See West Virginia*, 142 S. Ct. at 2621 (internal quotation omitted). If finalized, the proposal would commandeer state DOTs’ authority by forcing them to reduce vehicle emissions, likely necessitating shifts in vehicle fuel type usage and transportation modes without clear statutory authority. The proposal would also impose significant changes on the American economy and private spending as it would incentivize switching to electric vehicles, reducing vehicle miles traveled, and restructuring transportation networks.

FHWA attempts to justify the proposal based on a misguided and erroneous interpretation of section 150 and other sections in title 23, U.S.C. The 2012 surface transportation reauthorization law, the Moving Ahead for Progress in the 21st Century (MAP-21), Pub. L. 112-141, mandated a performance management approach for certain programs administered by the FHWA. Specifically, Congress established national goals and stipulated how those goals, the performance measures, and associated performance targets would be integrated into certain programs and federal transportation planning requirements. Section 150(b) sets forth the national goals of the federal-aid highway program, including “environmental sustainability,” which is defined as activities “to enhance the performance of the transportation system while protecting and enhancing the natural environment” (emphasis added). Section 150(c)(3) provides FHWA with authority to establish performance measures for conditions of pavement and bridges and performance of the Interstate System and National Highway System (NHS). The authority in 23 U.S.C. 150(c)(3) contains no reference to greenhouse gas emissions. Similarly, the National Highway Performance Program (NHPP) authorized in 23 U.S.C. 119, which FHWA tries to cite as providing authority for this proposal, does not include any discussion of environmental performance, let alone a reduction in greenhouse gas emissions.

FHWA wrongly asserts that section 150(c)(3) provides the agency with the regulatory authority necessary to pursue a GHG performance measure. The agency claims that because Congress did not define the term “performance” and because “environmental sustainability” is a national goal, FHWA has the authority to determine the nature and scope of “performance.” FHWA claims “performance” of the Interstate System and NHS under NHPP includes “environmental performance.” This interpretation of “performance” is contradicted by a plain text reading of 23 U.S.C. 150. “Performance” throughout section 150 was not intended to mean “environmental performance” which is evident by the environmental sustainability goal in section 150(b). The later part of the goal, would not be necessary if Congress intended “performance” to include “environmental performance.”

FHWA also asserts that President Biden’s Executive Orders 13990 and 14008 provide justification for the proposal and direct state DOTs and MPOs to set targets that align with those orders. Those orders can provide no further authority for FHWA to enact this proposal absent statutory authority. To tie performance measures and corresponding targets to executive orders creates long-term uncertainty for state DOTs and MPOs. Policy that is mandated in such a manner shifts with each change in administration, further demonstrating the pitfalls of attempting to enact policy absent specific congressional authorization.

Even if FHWA had authority to issue this proposal, the proposal would still be unreasonable in its execution. The proposal diverges from the construct of other performance measures established in 23 U.S.C. 150(c) by requiring state DOTs and MPOs to set declining (emphasis added) targets for greenhouse gas emissions. This requirement restricts the ability for state DOTs

and MPOs to set targets using a data-driven approach. Further hindering compliance, the proposal directs greenhouse gas emission targets to be set by October 1, 2022, before the comment period is even closed. The changes state DOTs and MPOs would need to make to achieve declining greenhouse gas emissions targets for each Transportation Performance Management four-year reporting period would take years of planning and execution.

FHWA has selected 2021 as the reference year to calculate the performance measure, making it even more difficult for state DOTs and MPOs to achieve a declining target. While we understand that 2021 was the most recent year for which data will be complete and available, the nation was still recovering from the COVID-19 pandemic at that time, which significantly impacted roadway travel. During the nationwide lockdown in 2020, there was a historic drop in light duty travel that totaled almost 355 billion vehicle miles, a reduction of over 12 percent from 2019, according to FHWA. While total vehicle miles traveled (VMT) rose in 2021 to almost pre-pandemic levels, VMT was still lower than 2019 levels and lower than what was predicted pre-pandemic. If those models stand true, and VMT gradually adjusts to predicted levels, the 2021 reference year would disadvantage all state DOTs' and MPOs' ability to achieve declining targets.

The proposal also lacks a rural state exemption, taking a one-size-fits-all approach to addressing greenhouse emissions. When Congress debated providing FHWA with the authority for a greenhouse gas performance measure, an exemption for states with certain population densities was considered. FHWA's proposal disadvantages rural states and places an unreasonable burden on them by failing to recognize the unique situation of those states. For example, one theoretical way to reduce greenhouse gas emissions in urban areas is to increase usage of alternative transportation options, such as public transit and biking. However, in rural areas, modal shifts are often not feasible and do not improve connectivity and safety in the way they might in a large urban area.

In sum, FHWA does not have the statutory authority to proceed with this proposal. The agency's actions demonstrate a complete disregard for the law and an overreach of its authority provided by Congress. Again, we request that you withdraw this proposal immediately and instead focus staff time and resources on the implementation of the IIJA as enacted by Congress.

Sincerely,

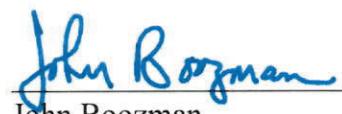


Shelley Moore Capito
Ranking Member
Environment and Public Works Committee



Kevin Cramer
United States Senator


John Barrasso
John Barrasso, M.D.
United States Senator


John Boozman
John Boozman
United States Senator


Mike Braun
Mike Braun
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John Cornyn
John Cornyn
United States Senator


Mike Crapo
Mike Crapo
United States Senator


Ted Cruz
Ted Cruz
United States Senator


Steve Daines
Steve Daines
United States Senator

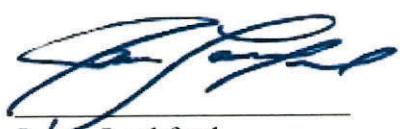

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